The Towns of Palestine under Muslim Rule AD 600-1600

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PREFACE

The origin of this book was an investigation of the archaeology and history of Ramla from its origins in the early eighth century to the end of the sixteenth century (1). However during research on this topic it became clear that little was known of the long-term development of the other cities of Palestine. Whilst a considerable amount of attention has focussed on the transition of cities from the Classical/Byzantine period to the early Islamic period very little attention has been paid to the transition from the early Islamic to the medieval period. Therefore it was decided that it might be better to look at Ramla within the context of long-term changes in other Palestinian cities. There are two main questions which are of interest over this long time span which are; 1) Did the towns of Palestine decline in their quality, size or number during Muslim rule? and 2) To what extent did the towns of Palestine during the Muslim period differ from towns of the Crusader and Byzantine periods?

The first question arises out of a comparison between A.H.M. Jones' (1971) list of more than forty cities in Palestine before the Muslim conquest and the sixteenth century Ottoman tax registers which record only six cities (see **Table 1**) (2). The second question is concerned with what constitutes a Muslim city and obviously has wider implications beyond Palestine.

In order to answer these questions I have divided this thesis into four parts. In Part One (Chapters 1-2) I will examine various urban concepts and how they can be studied archaeologically. In the Part Two (Chapters 3-7) I will look at the cities from a chronological perspective within the wider context of Bilad al-Sham. Part Three will adopt a regional approach looking at case studies of twenty-six town in Palestine.

Part Two is divided into five chapters; the first (Chapter 3) includes the Byzantine era up to the Muslim conquest; the second (Chapter 4), defined as the early Islamic period lasts until the Crusader conquest of 1099 and includes the Umayyad, Abbasid and Fatimid periods; the third (Chapter 5) lasts from the Crusader conquest of 1099 until the final expulsion of the Franks from Acre in 1291; the fourth (Chapter 6), deals with the rule of the Ayyubids and Mamluks from the battle of Hattin in 1187 until the Ottoman conquest of 1516; the final section (Chapter 7) discusses the first century of Ottoman rule.

Part Three is an investigation of twenty-six urban sites in Palestine (3). The discussion of the towns is divided into four chapters (Chapters 8-11) each of which highlights different aspects of the changes which took place between the Byzantine and early Ottoman periods. The first chapter (Chapter 8) comprises the towns of the Negev which apparently flourished during the Byzantine period yet seem to have ceased to exist shortly after the advent of Islam. The second chapter (Chapter 9) comprises the towns of the former Byzantine province of Palaestina II which lie to the west of the Jordan. The third chapter (Chapter 10) comprises the coastal towns of Palestina I and the fourth discusses Ramla. Most of the information is derived from published sources (supplemented by information from the archives of the Palestine Antiquities Authority) although I have visited all the sites in the catalogue.

Table 1. List of urban sites from Byzantine to early Ottoman times.

Numbers 1-54 are derived from A.H.M. Jones *Cities of the Eastern Empire* Oxford 1971.
Numbers 55-62 are urban sites which are known from the medieval and Ottoman periods.
Numbers 63-66 are Byzantine sites which are known from archaeology but which do not appear as towns in Jor *Cities of the Eastern Empire*.

No.	Name	Byzantine District	Byzantine Status	Arabic District	Early Islamic Status	Crusader Status	Mamluk Status	Ottoman Status
1*	Caesarea	Palaestina I	Town	Filistin	Town	Town	-----------	-----------
2*	Dora [Dor/Tantura]	Palaestina I	Town	Filistin	Town?	Town	-----------	-----------
3	Antipatris [Ras al-'Ayn/Tell Aphek]	Palaestina I	Village	Filistin	?	-----------	-----------	-----------
4	Diospolis [Lod/ Lydda]	Palaestina I	Town	Filistin	Town	Town	-----------	-----------
5*	Jamnia[Yavne/ Yibna]	Palaestina I	Town	Filistin	Town	Town	Town	-----------
6	Nicopolis [Emmaus]	Palaestina I	Town	Filistin	Town?	-----------		-----------
7*	Azotus Hippinus [Ashdod/ Isdud]	Palaestina I	Town	Filistin	?	-----------	-----------	-----------
8*	Azotus Paralus [Ashdod Yam]	Palaestina I	Town	Filistin	Town	-----------	-----------	-----------
9	Eleutheropolis [Bayt Jibrin/Beth Guvrin]	Palaestina I	Town	Filistin	Town	Town	Town	-----------
10	Aelia [Jerusalem]	Palaestina I	Town	Filistin	Town	Town	Town	Town
11	Neapolis [Nablus]	Palaestina I	Town	Filistin	Town	Town	Town	Town
12	Sebaste [Samaria/ Sebastiya]	Palaestina I	Town	Filistin	Town?	Town	?	-----------
13	Anthedon [near Gaza?]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
14	Diocletianopolis [near Gaza]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
15	Sariphea [same as above?]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
16	Maiuma of Ascalon [near/same as above?]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
17	Sycamazon [south of Gaza]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
18	Ono [between Jaffa and Lydda]	Palaestina I	Town?	Filistin	?	-----------	-----------	-----------
19*	Sozusa [Appollonia/ Arsuf]	Palestine I	Town	Filistin	Town	Town	Village	-----------
20*	Joppa [Jaffa]	Palaestina I	Town	Filistin	Town	Town	?	-----------
21	Gaza	Palaestina I	Town	Filistin	Town	Town	Town	Town
22	Maiuma of Gaza	Palaestina I	?	Filistin	?	-----------	-----------	-----------
23	Raphia [South of Gaza]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
24*	Ascalon	Palaestina I	Town	Filistin	Town	Town	-----------	-----------
25	Bittylius [north of Gaza]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
26	Amathus [Jordan Valley south of Pella, east of Nablus]	Palaestina I	?	Filistin	?	-----------	-----------	-----------
27	Jericho	Palaestina I	Town	Filistin	?	Town	?	Village

28	Livias	Palaestina I	?	Filistin	?	--------------	-----------	-----------
29*	Gerara [1st capital of Saltus Geraiticus (Imperial Estate)]	Palaestina I	?	Filistin	?	--------------	-----------	-----------
30*	Orda [2nd capital of Saltus Geraiticus (Imperial Estate)]	Palaestina I	?	Filistin	?	--------------	-----------	-----------
31	Saltus Constantinius [?]	Palaestina I	?	Filistin	?	--------------	-----------	-----------
32	Menois [south of Gaza]	Palaestina I	?	Filistin	?	--------------	-----------	-----------
33	Tricomia [east of Bayt Jibrin]	Palaestina I	?	Filistin	?	--------------	-----------	-----------
34	Bacatha	Palaestina I	?	Filistin	?	--------------	-----------	-----------
35	Parembole	Palaestina I	?	Filistin	?	--------------	-----------	-----------
36*	Scythopolis [Baysan/Beth Shean]	Palaestina II	Town	Urdunn	Town	Town	Town	-----------
37*	Tiberias	Palaestina II	Town	Urdunn	Town	Town	?	-----------
38	Helenopolis [Megiddo]	Palaestina II	?	Urdunn	-----------	--------------	-----------	-----------
39*	Diocaesarea [Sepphoris]	Palaestina II	Town	Urdunn	Town	--------------	-----------	-----------
40	Maximianoplois [west of Baysan]	Palaestina II	?	Urdunn	?	--------------	-----------	-----------
41	Gabae	Palaestina II	?	Urdunn	?	--------------	-----------	-----------
42	Tetracomia	Palaestina II	?	Urdunn	?	--------------	-----------	-----------
43	Gaulane	Palaestina II	?	Urdunn	?	--------------	-----------	-----------
44	Nais [north of Baysan]	Palaestina II	?	Urdunn	?	--------------	-----------	-----------
45	Exalo [south of Sepphoris]	Palaestina II	?	Urdunn	?	--------------	-----------	-----------
46*	Augustopolis [Avdat]	Palaestina III	Town	Filistin	?	--------------	-----------	-----------
47*	Elusa	Palaestina III	Town	Filistin	?	--------------	-----------	-----------
48*	Birosaba [Beersheba]	Palaestina III	Town	Filistin	Town?	--------------	-----------	-----------
49*	Aela [Aqaba]	Palaestina III	Town	Filistin	Town	Town	Town	-----------
50	Pentacomia	Palaestina III	?	Filistin	?	--------------	-----------	-----------
51	Mampsora	Palaestina III	?	Filistin	?	--------------	-----------	-----------
52	Saltus Hieraticus	Palaestina III	?	Filistin	?	--------------	-----------	-----------
53	Iotabe	Palaestina III	?	Filistin	?	--------------	-----------	-----------
54	Phaenoa	Palaestina III	?	Filistin	?	--------------	-----------	-----------
55*	Ramla	--------------	--------------	Filistin	Town	Town	Town	Town
56*	Safed	--------------	--------------	-----------	-----------	Town	Town	Town
57*	Qaqun	--------------	--------------	-----------	-----------	Town	Town	Village
58*	Majdal	--------------	--------------	-----------	-----------	------------	Town	Town?
59	Jenin	--------------	Village	-----------	Village	Village	Village	Town?
60*	Nazareth	Palestina II	Village	Filistin	Village	Town	Village	Village
61	Hebron	Palestina I	Village	Filistin	Town	Town	----------	Town
62	Darum / Dayr al-Balah	Palestina I	?	Filistin	?	Town	----------	-----------
63*	'Isbaita/Shivta	Palestina III	Town	Filistin	-----------	--------------	----------	------------

64*	Nizzana	Palestina III	Town	Filistin	-----------	--------------	---------	------------
65*	Rehovot in the Negev	Palestina III	Town	--------	----------	-------------	----------	------------
66*	Mampsis	Palestina III	Town	---------	----------	--------------	----------	------------

* indicates the town is included in the detailed discussions in Chapters 8-11.

NOTES

(1) The end of the sixteenth century was taken as a convenient finishing point because at this date we have the quantifiable population data.
(2) cf. Gil 1992, 275 who states 'We know that of 93 towns in the Sharon of which a geographical survey prov evidence during the Roman Byzantine period, only 52 remained at the end of the Crusader period'. Here it shoul pointed out that Gil employs the term town in a very loose sense and his statement makes more sense if we substi the word settlement which is the word used in Guy's original survey. In any case the point is that there had be drastic reduction in the number of settled sites.
(3) With the exception of 'Aqaba all of the towns selected are within the internationally recognized borders of mo Israel as the data for this area is more plentiful than for either the West Bank or Gaza where there has been l archaeological activity during the last fifty years.

1. URBAN THEORY

Historical Urban Traditions

Any consideration of urbanism in the medieval Islamic world must be set in a broad historical context. Three different historic urban traditions are of particular relevance to the Islamic world. The first is that of the ancient Near East which besides occupying much of the same landscape as the Islamic world, also has the oldest urban traditions. The second is that of the Classical world which is fundamental to an understanding of both Islamic and Western civilization. The third is that of Medieval and Early Modern Europe which, as a culture contemporary with medieval Islam, has much comparative material and has generally received more scholarly attention (in particular archaeological documentation see chapter 2).

Before looking at these traditions it is worth making some general observations. Urbanism is a complex phenomenon which is experienced in various forms in different parts of the world. Attempts to provide rigid definitions which fit all situations are now generally treated with caution (see for example Carter 1981, 17-18 and Table 2-1); however, the influence of such proscriptive ideas is still found in the literature. The most famous and influential example is the work of the famous German historical sociologist Max Weber (1864-1920). He listed five conditions essential to the existence of a city: 1) a fortification 2) a market, 3) a court of its own and at least partially autonomous law; 4) a related form of association; and 5) at least partial autonomy and autocephaly." (Weber 1966, 80-1) .

The conditions are obviously only applicable to a few cities in Western Europe and are useless when one is considering urbanism in a non-European context. Weber's most controversial condition was that cities must be partially autonomous which is a condition which would exclude most Islamic settlements (see discussion in section on Islamic urbanism). Other conditions such as the possession of fortifications are also questionable as a town wall does not guarantee urban status. Problems such as these have meant that recent writers have been less enthusiastic about Weber's pre-conditions and have instead focussed on more inclusive definitions. For example Carter (1981, 37) defines a town as a place that fulfils the following three functions:

1) Central place functions, or general services, which are carried out for a more or less extensive but contiguous area;
2) Transport functions, which are carried out at break of bulk points along the major lines of communications;
3) Special functions, which are carried out for non-local, non-contiguous areas.

Whilst this definition is of some use in defining the role of a town it gives no idea of the physical and social characteristics expected and the functions listed could for example describe a railway station and goods yard. The physical and social characteristics would involve some idea of size and population. However these are both notoriously hard to define in distinction from other forms of settlement as they will vary through time and in different locations.

Early Cities

One of the most obvious ways to approach a definition of the concept of a town is to look at the work of pre-historians concerned with the rise of urbanism. This is particularly appropriate in a consideration of Islamic urbanism as many of the early urban centres were located in an area which was later central to the Islamic world (Iraq/ Mesopotamia and Egypt). The importance of this link can be seen in a conference on Middle Eastern Cities organised by Lapidus which emphasised the continuity of urban traditions in the area (Lapidus ed. 1969). One of the first writers to approach the subject of early cities was the eminent prehistorian V. G. Childe (1892-1957) who discussed it in two books *Man Makes Himself* (1936) and *What Happened in History* (1942). He gave a list of innovations which enabled humans to transform Neolithic settlements to urban centres. The list included writing, use of animals for traction, wheeled carts, the plough, metallurgy, standard units of measurement, sailing boats, surplus production, craft specialization, irrigation and mathematics. There are obvious problems with this approach which would deny urban status to major civilizations on the basis of the absence of one or more of these attributes. For example the absence of writing in the Maya and Inca cultures would disqualify them from urban status as arguably would the absence of wheeled transport in much of the Islamic world. Writers who have criticized Childe's approach include Lamberg-Karlovsky (1979, 165) who stated "...such a list is of very little help in defining civilization". Adams (1979) proposed a more sociological approach based on three criteria which may be summarized as follows;

1) Class stratification, each stratum marked by a highly different degree of ownership or control of the main productive resources.
2) Political and religious hierarchies complementing each other in the administration of territorially organized states.
3) Complex division of labour, with full-time craftsmen, servants, soldiers and officials existing alongside the great mass of primary peasant producers.

However Adams warned against too rigid a definition by observing "There is not one origin of cities, but as many as there are independent cultural traditions with an urban way of life" (Adams 1979, 177).

Within his discussion of the "Origin of Cities" Adams gives a description of early towns as revealed by excavations which may be useful in defining typical urban features. Firstly he observes that whilst the earliest towns may have been no larger than the "farming villages of the pre-urban era" they were "more densely built up and more formally laid out along a rectangular grid of streets or lanes". There would be large public buildings (temples) which formed the focus of a radiating street pattern. The streets were unpaved "but straight and wide enough for the passage of solid wheeled carts or chariots". The main streets were lined with large residences whilst those of the poorer people were located in alleyways behind. Although there was no public market (private commerce had not yet appeared) mercantile activity was concentrated at the quays or by the city gates. The town was surrounded by "massive fortifications that guarded the city against nomadic raids and the usually formidable campaigns of neighboring rulers".

From the above description it can be seen that many of the features of early cities continued to be characteristics of pre-modern cities.

Classical (Greek and Roman) Urbanism

It is a commonplace that many of our own, modern perceptions of urbanism are derived from Classical, Greek and Roman, civilization. This is true both in terms of philosophy and actual towns and cities. Our words to describe towns and cities are mostly derived from Greek and Latin (e.g. *Polis*, *urbs, civitas* and *municipam*) and many of the physical attributes which we identify with cities originated in this period. Examples include orthogonal town planning (see urban planning) and public buildings such as baths, theatres, hippodromes and markets (the Greek *agora* and Roman *forum*). However, probably the most significant development was the political and social organisation of towns and cities which was later used as a model for political systems. For example the word 'civilize/civilization' implies that citizens (*cives*) have a higher status than 'rustics' or 'pagans' the inhabitants of the countryside (*rus*) and villages (*pagi*).

One of the consequences of the identification of Western culture with the cities of the Classical world is that it implies that cities are a (Western) European institution and that other urban traditions are somehow less pure. This view ignores the fact that Western Europe was influenced by other urban traditions (e.g. Viking) and that there was a strong element of continuity of Classical civilization in the Near East which was absorbed by Islamic tradition (the elements of continuity are evident in the cities of Palestine see for example Baysan). For the present it is sufficient to state that Islamic urbanism had both Classical and more ancient Near Eastern roots.

Medieval Urbanism in Europe

Medieval Europe is of direct interest when studying medieval Islamic urbanism both because of the common roots and the comparable timescale. In the past, studies of medieval urbanism have concentrated on the development of civic institutions and associations (e.g. guilds) which made them the semi-autonomous settlements described by Weber. According to Postan (1972, 212) towns were "Non-feudal islands in a feudal sea". Today, however, they are seen as an integral part of the feudal system subject to an ecclesiastical, lay or royal lord (Swanson 1999, 3). Similarly borough status is now thought to be less important than previously as "in all parts of the British Isles there were places called boroughs that never developed into towns. Equally there were settlements functioning as towns for decades before they were formally made boroughs" (Swanson 1999, 2). The primary qualification for urban status is today thought to be the existence of a market (Swanson 1999, 2-3 see also Carter 1981, 7). For example Miller and Hatcher (1980, 70) give the following definition of a town;

"Towns were above all markets....they were relatively densely populated centres that could not be self sufficient in foodstuffs... [they were] manufacturing centres....and the sale of their manufactures was the obvious way to pay for the foodstuffs and the materials the countryside provided, [as] established centres of trade [they were] able to offer the appropriate facilities to travellers and traders, they were natural ports of call for long range merchants".

Early Modern Urbanism

In his work on the Mediterranean, Braudel saw towns and cities as primarily products of geography. They owed their existence to roads (including sea routes) which in turn were dependant on the towns. He expresses this relationship as follows " The Mediterranean as a human unit is the combination over an area of route networks and urban centres, lines of force and nodal points" (Braudel 1972, I, 277). Within this simple definition he proposed a rough typology of towns, though taking care to point out that the categories were fluid and overlapped[1]. The basic divisions were as follows: bureaucratic towns, commercial towns, industrial towns, financial towns, agricultural towns, clerical and military towns. Within these categories there were further divisions, thus industrial towns could be either capitalist or led by artisans. There were also relationships between particular categories, thus Braudel postulated that a commercial city which had some difficulty in its trading functions might develop into an industrial city and that when both commerce and industry were in decline banking might take over. In this case the different categories may represent different phases in the life of

[1] Much of the typology of towns employed by Braudel was borrowed from the Spanish historian Felipe Martin.

one city. Other considerations which need to be made are between different ranks of city and the relationship between cities and neighbouring towns (Braudel 1972, I, 316-325). The importance of Braudel's typology for the present study is that it shows the variety of urban settlement and the complexity of any categorisation.

Review of Islamic Urban Theory (Historiography of Islamic Urbanism)

The literature on the Islamic city is considerable and stretches over a number of disciplines including, architecture, archaeology, history, town planning, anthropology and sociology[2]. Theoretical work, however, has tended to be a product of the latter two disciplines whilst archaeology has until recently provided very little theoretical thought on the nature of the Islamic cities. Much of the following review is therefore more concerned with defining the concept of the Islamic city rather than with specific issues about their origins, physical lay-out, typologies or functions (these other issues will be discussed in the later chapters). The following discussion will first consider Arabic concepts of the Islamic city and then look at the development of Western thinking on Islamic urbanism.

Cities are present in Islamic thought from the inception of the religion both in the practical sense that Muhammad was from a city and from the fact that cities are represented in the Koran (see for example Sura 42:7). Interest in Islamic urbanism is demonstrated in Arabic writing from at least the tenth century. For example the geographer al-Muqaddasi wrote a discussion of the subject as a preface to his list of town and cities. In this discussion he ranks settlements by analogy with political administration, thus capitals are listed as kings, provincial capitals as chamberlains, ordinary towns as cavalrymen and villages as foot soldiers. He was aware that there were problems of definition particularly over what constituted a metropolis: jurists defined it as a place with a large population, with its own courts and resident governor and the ability to pay public expenses from its own revenue; lexicographers define it as a place between two regions; and the lay-man defines it as any large and important town. Muqaddasi's own definition was primarily political: according to him a metropolis was the residence of a ruler with attendant administration and was dominant over neighbouring cities (al-Muqaddasi, ed. de Goeje 1906, 84-5)[3].

In the fourteenth century Ibn Khaldun (1337-1406) devoted part of his monumental work *al-Muqaddimah* to a consideration of the nature of cities/towns. He believed that cities were repositories of sedentary culture (*umran hadara* / ا مرأ حضرى) as opposed to the nomadic lifestyle (*umran badawa* / ا مرأ بدوى) practised by herdsmen and mountain dwellers. The source of sedentary life in a city was the power of a ruler or dynasty who provided security and stability. Ibn Khaldun explained his views as follows "... because cities have a highly developed civilization and their inhabitants are very prosperous, and the dynasty is at the root of it, because the dynasty collects the property of the subjects and spend it on the inner circle and on the men connected with it who are more influential by reason of their position than by reason of their property". However he also he thought that city life corrupted rulers and dynasties which had originated in the harsh but pure lifestyle of the nomad (*umran badawa* / ا مرأ بدوى). This was the reason for the instability which he observed was endemic in the life of North Africa in the fourteenth century (Ibn Khaldun *The Muqaddimah, II, 286-7)*. Perhaps because of this Ibn Khaldun portrays "... a deep rooted prejudice, a profound antipathy, towards the urban population accusing them of every possible fault and vice" (Lacoste 1984, 118). Modern writers such as Yves Lacoste (1984,118-31), have suggested that the reason for Ibn Khaldun's hostility to city dwellers was that he perceived them to lack a civic solidarity or the urban equivalent of *'asabiya* (عصبية), tribal solidarity. In many respects this fits in well with Max Weber's view of the Islamic city discussed below although an important limitation should be borne in mind. Ibn Khaldun was only writing from his experience of North Africa and specifically contrasts the instability of this area with the stability of the medieval East.

Western interest in the Islamic city began with the work of the famous German sociologist Max Weber (1864-1920) writing in the early twentieth century. Weber developed theories about the development of world society, which have often been regarded as a response to Karl Marx's materialist explanation of world history[4]. His most famous theory identified Protestantism with the growth of capitalism. Although Weber did not articulate a fully developed theory about Islam he dealt with the subject in a number of works (see Turner 1974 for Weber's writings on Islam). He had a negative view of Islam (which he accused of having a purely hedonist spirit "especially towards women, luxuries and property") and regarded it as the 'polar opposite of Puritanism' which he believed was the spirit behind the development of capitalism (Turner 1974, 12). It is perhaps significant that Weber wrote during the period of the final collapse of the Ottoman Empire which, in the nineteenth and early twentieth centuries, was characterised as in terminal decline[5]. Weber had a particular interest in cities which he saw as fundamental to the development of European Puritanism and capitalism (e.g. Weber *The City* New York 1960 and 1966). He argued that Islam impeded the growth of autonomous cities because of its warrior religiosity and patrimonialism. He laid down five pre-conditions for the development of urban communities which were described at the start of this chapter (see also

[2] For a recent bibliography of the Islamic city see Bonine et al 1994.

[3] For a recent discussion of Muqaddasi's categorisation of towns and cities see Wheatley (2001, 74-84).

[4] Turner (1974, 12) convincingly rejects this interpretation of Weber's work.

[5] See for example William Elton 1809, 126-7 quoted in Vucinich 1965, 151.

Weber *The City* 1966, 80-1). According to Weber Islamic cities lacked at least two of these elements (i.e. partial autonomy and a form of association) which meant that they did not constitute cities in a European sense (cf Ibn Kaldun above).

Although there is some doubt as to whether Weber's definition could even be applied to most European cities his criteria became a subject of debate amongst scholars of Islam and led to the development of theories of Islamic urbanism. The most prominent of these theories may be referred to as the Marcais/Von Grunebaum model/stereotype. The aim of this model was to demonstrate that Muslim cities had a unique identity which made them different from, but equal to, European cities.

Janet Abu Lughod (1987) has given a critical review of this theory that has formed the starting point for most recent research in this field (see for example AlSayyad 1991). She has aptly compared the tradition of scholarship in this area to an *isnad* (اسناد) or chain of tradition in Islamic history whereby one follows a particular chain of authority to establish a particular fact or way of thought. According to this system some chains are thought to be more secure than others (Abu Luhgod 1987, Alsayyad 1991, Insoll 1999, 202). Abu Lughod's research will also serve as a basis for the following review of the Marcais/Von Grunebaum model/stereotype modified by my own observations.

The origins of this thesis are to be found in the work of the Marcais brothers carried out in North Africa and published in the 1920s and 1940s (**Fig 1**). In an article published in 1928 William Marcais made several observations which were to become fundamental in the creation of a model or stereotype Islamic City (Marcais 1928). Firstly he observed that Islam is an urban religion, that Muhammad was a member of the urban bourgeoisie and that all the early caliphs were of urban origin[6]. He also observed that the concept of Friday prayer in a congregational Mosque was a reflection of the urban nature of the religion. He identified three physical elements which were part of the Muslim city, a Friday Mosque (*Masjid jami*) , a market (*suq*) and a public bath house (*hammam*). More than ten years later Georges Marcais developed the ideas of his brother re-enforcing the urban nature of Islam as a religion by quoting Ernest Renan "The Mosque, like the synagogue and the church, is a thing essentially urban. Islamism is a religion of cities". Georges Marcais also added three elements to the physical composition of the typical Islamic city, 1) a differentiation between commercial and residential quarters 2) the segregation of residential quarters according to ethnicity or specialization 3) a hierarchical order of trades in the markets starting with cleaner, less polluting, trades near the mosque (Marcais 1945).

The work of the Marcais brothers formed the basis for subsequent work on Islamic cities by the French scholars Le Tourneau and Berque. Roger Le Tourneau modified the stereotype to fit the city of Fez, which he then presented as the typical North African city (Le Tourneau 1957). Jacques Berque also followed the stereotype established by the Marcais brothers but added a functional dimension stating that the city was primarily a place of witness and exchange. These two functions were represented by the three elements identified by William Marcais, a Friday Mosque, a market and a public bathhouse (Berque 1958). In the 1940s another French scholar Jean Sauvaget embarked on a study of the Syrian cities of Aleppo and Damascus. He was obviously aware of the model of a typical Islamic city developed by his colleagues in North Africa and saw that it could not be directly applied to the cities of Syria which had their origins in Greco-Roman town plans. In response Sauvaget developed his own model of an Islamic city based on the ideas developed by Marcais, Le Tourneau and Berque but modified by the physical elements that he had observed in Damascus (**Fig. 2**). His typical Syrian Islamic city had four principal elements: a market (suq) developed out of the pre-Islamic colonnaded street, a mosque which occupied the site of a church or pre-Islamic temple, a central square from pre-Islamic times (which gradually became filled with houses and shops) and a citadel which was often located on a hill (Sauvaget 1934; 1941).

The work of Sauvaget and Marcais was later developed by the famous German American orientalist Von Grunebaum, who, in a series of articles, outlined the form of the typical Islamic city. He merged the Syrian and North African models together to produce a composite stereotype of an Islamic city. He also made two of his own additions to the model: 1) that The Friday Mosque is placed along the main thoroughfare or at the rectangular crossing of the two main thoroughfares, which is usually marked by a spread out square; 2) that near the *Jami* (Friday mosque) we find the principal government buildings or palace of the ruler (von Grunebaum 1955). Unlike Sauvaget and the Marcais brothers von Grunebaum's work was not based on any real cities yet it became established as a model to which later writers referred. The study of Islamic cities had thus become a theoretical discipline in which real cities were secondary to the model Islamic city. During the 1960s Grunebaums's typical Islamic city was implicitly accepted by a number of scholars including Jairazbhoy (1965), Ismail (1969) and Monier (1971). Although each of these studies questioned some of the details of the Von Grunebaum thesis they all accepted its assumption of a typical Islamic city with specific identifiable features. For example Jairazbhoy challenged writers such as de Planhol (1957) who stated that the Islamic city was characterised by irregularity and anarchy by referring to the inherent plan in the typical Islamic city as defined by Marcais, Sauvaget and others. Ironically the assertion of chaos in Islamic cities by de Planhol and others were also based on the Marcais/ Von Grunebaum model. The Lebanese architect Monier (1971) adapted the model to fit his own

[6] Compare this to Weber's claim of warrior religiosity (Turner 1974,95).

area of research, which was the medieval city of Cairo whilst another Arab scholar Ismail (1969) attempted a more historical approach based on early Arab sources before reverting to the Marcais /von Grunebaum plan. Within the wider field of Islamic studies this model was propagated by the historian Albert Hourani who in 1970 organized a conference on the Islamic city (Hourani and Stern 1970). The proceedings of this conference were later published and became a reference point for subsequent studies. For example Heinz Gaube published a book on Iranian cities in which he tried to establish a model for the Iranian city as a variation of the typical Islamic city (1979). Samuel Noe adopted a similar approach in his work on the city of Lahore in Pakistan which he directly compared it to the Islamic city of Marcais and Von Grunebaum (Noe 1980).

By the late 1960s there were a number of scholars (eg Cahen 1970 and Aubin 1970) who questioned the model by demonstrating that many of the unique characteristics of the Islamic city "were in fact those of the medieval Italian city, the Byzantine city, or even the Asian or Chinese city" (Alsayyad 1991, 36). One of the most important critics of the established view was Ira Lapidus. In his book *Muslim Cities of the Later Middle Ages* he analysed Islamic cities as social systems in their own right rather than in comparison with European stereotypes (Lapidus 1967). He concluded that the Islamic city was formed by a number of groups which he identified as the military élites, the ullema (religious leaders), merchants and notables, and urban commoners. The cities were ruled by the military elites with the tacit support of the merchants and ullema. Later Lapidus developed these views at a conference on *The Middle Eastern City* in which he wrote " We can no longer think of Muslim cities as unique...cities were physical entities but not unified social bodies defined by characteristically Muslim qualities" (Lapidus 1969,73). Lapidus was here referring to what he believed to be an artificial distinction between urban and rural settlement, although the obvious implication is that Islamic cities are not a distinct form of urban development as proposed by the Marcais/ von Grunebaum model. A further attack on the Marcais/ Von Grunebaum model came in the 1970's with the publication of Edward Said's important work *Orientalism* (Said 1978). Said questioned the basis of Western scholarship which regarded "the East" as interesting but essentially inferior. He also made the point that much of Western scholarship was written from a standpoint of colonial domination. Although Said did not directly concern himself with the issue of Islamic cities, the implications of his work for the Marcais/ von Grunebaum model are clear. The model had originated with the work of Marcais and Sauvaget both of whom worked for French colonial régimes whilst Von Grunebaum was singled out for particular criticism by Said, who accused him of an "almost virulent dislike of Islam" (1978, 296).

The combined effect of Said's influential writing on Orientalism and Lapidus's work on the social structure of medieval Islamic cities meant that the Marcais/Von Grunebaum model was discredited in many academic circles (see for example Abu Lughod 1987, Alsayyad 1991 and Insoll 1999). However other scholars have continued to use and develop the model. Thus at a conference on the Middle Eastern City Saggaf rejected Lapidus' assertion that Muslim cities were not unified social bodies by stating ".... Muslim cities do have certain distinctive features. They have a unique layout and physical design, the central focus point of which is always a Maidan around a castle or palace on the one hand and the central mosque on the other hand." (Saggaf 1987,3)

Alsayyad has characterized Saggaf and other recent supporters of the model as 'political nationalists'. He defines the group as follows: "they are mostly from very traditional Arab societies ,…their research is mainly sponsored by countries with strong political ideologies, or.. their writing has a strong nationalistic tone" (Alsayyad 1991, 38-9) He includes in this group a number of Arabic/Muslim scholars including Akbar (1989), al-Halthoul (1981) and Hakim (1986). Alsayyad suggests that these writers wanted to protect the notion of the Arab city as defined by Marcais and Von Grunebaum as they regarded it as part of their institutional identity. This was regardless of the fact that the model was invented by foreign 'orientalist' scholars. According to Hakim, for example, Islamic cities were determined by Muslim laws which guided building measurements, plot dimensions and other aspects of the building process. He summarised his views as follows; "Hence all cities in the Arabic and Islamic world inhabited by Muslims share an Islamic identity which is directly due to the application of *sharia* values to the process of city building." (Hakim 1986, 137-9). In contrast to this strong determinist position other Muslim scholars have developed ideas based on other aspects of Islamic culture. For example Ardlan and Bakhtiar (1973) have used Sufism as a way of exploring city design, suggesting that the location of mosque is a symbol of the unity of Islam. Nezzar AlSayyad (1991) on the other hand, believes that the character of Islamic urbanism can best be understood by examining the physical layout of the earliest Islamic towns.

Another approach to the theory of Islamic cities is what may be termed a regional approach. This sees Islamic urbanism as a product of a particular historical geography. Two notable proponents of this approach are Ferdinand Braudel and K.N.Chaudhuri. There is much similarity between their work with both choosing a body of water as the defining geographical indicator, in the case of Braudel the Mediterranean and with Chaudhuri the Indian Ocean.

Braudel specifically rejected Weber's view of Western [European] towns as the ideal urban type replacing it instead with the statement that " a town is a town wherever it is" (1977, I,481). He saw Islamic cities in the Middle East and North Africa as a part of a Mediterranean culture; " I retain the firm conviction that

the Turkish Mediterranean lived and breathed with the same rhythms as the Christian, that the whole sea shared a common destiny" (Braudel 1972, 14). This common culture was predominantly urban leading him to observe that "the prevailing order in the Mediterranean has been one dictated primarily by towns" (Braudel 1972-3, I,278).

Chaudhuri supported Braudel's work on towns in particular the assertion that towns are towns irrespective of their locations. For example Chaudhuri observed that, "In all the major languages of Asia the equivalent word for a town is understood by the speakers without the help of a lexicon" (Chaudhuri 1990, 340). Although Chaudhuri's work deals with the whole of Asia, Islam and the Middle East plays a significant part in his work. It is for example noticeable that he takes the rise of Islam as a starting point for his history. Chaudhuri devotes some space to a discussion entitled "Islam and urbanisation" in which he attempts to characterise Islamic towns. Chaudhuri sees a strong association between Islam and urbanism which can be seen in the following statement "Wherever Islam made its presence felt as an indivisible combination of power, communication, and exchange, urbanisation flourished and expanded". Chaudhuri singled out two inter-related features which shaped the development of Islamic cities the first of these was the mosque, the second was Mecca. The role of the mosque was as an architectural embodiment of Muslim culture which through its association with other buildings would affect urban planning. The role of Mecca was as a type city: "No one could deny that if there were such a thing as an Islamic city, its signifier should be Mecca, followed by Medina". (Chaudhuri 1990, 344-6).

The above review shows that Western thinking on Islamic cities has been dominated by Weber's very specific concept of a city. This led researchers working in the Islamic world to develop their own theory of urbanism. Although originally intended as a positive statement about Muslim culture this model became a rigid stereotype with negative connotations. Beginning with Lapidus's work on medieval cities in Syria, scholars began to abandon the stereotype of Islamic urbanism, which saw cities as unique repositories of Muslim culture. Although for most purposes the stereotype was abandoned, its physical characteristics continued to be used as a demonstration of the physical form of Islamic cities (see for example Hodgson 1974,II, 105-35 esp.116). It was only when Janet Abu Lughod pointed out the persistence of the physical model that it ceased to be generally used. By this time Weber's criteria for cities were not widely accepted so that Islamic cities were able to be regarded on an equal footing with those of Europe or elsewhere (cf Braudel and Chaudhuri above). In recent times there have been renewed attempts to define a specifically Islamic urban character by relating cities to Islamic law, religion or history.

Questions of Scale. Town or City?

It is generally agreed that there is a distinction between a town and a city; however, the nature of the distinction is seldom discussed. In some cases the terms 'city' and 'town' are used interchangeably and at other times, sometimes even in the same work, in a more distinctive specialized sense (see for example Cameron 1993, 152-175). The term "town" has two overlapping meanings: on the one hand it may be used to refer to any urban settlement, whilst on the other it may be used to distinguish a smaller settlement (town) from a larger settlement (city). The term city also has two overlapping meanings one meaning denoting any urban settlement (see for example Jaffa Research Centre 1991) and the other meaning distinguishing it from smaller or less important settlements (towns). Generally speaking the distinction is thought to be one of scale (c.f. Gulick 1983, 101) although it has also been suggested that there may be other criteria for the distinction. For the purposes of this research the problem is complicated by the fact that the settlements under consideration are remote both in time and in culture thus a working definition for the medieval west is not necessarily appropriate for Medieval Islam. For example in medieval Spain a city was defined as a place which had a bishop and walls (Ortiz 1971, 130-1, quoted in Keay 1988, 183-4) obviously the same criteria could not apply to a Muslim city.

Probably the best discussion of this problem in relation to the Middle East is by Gulick (1983, 101-3). He argues that to a certain extent the differentiation between towns and cities is simply a matter of scale thus " ... towns are simply small cities and cities are simply big towns... there are no obvious distinctions between them, and... the obvious differences in size and importance among the places in question are differences in gradation only" (1983, 101).

As Gulick admits there are problems with this approach of assessing city status merely in terms of size. The most obvious is that populations vary in time and space thus what may count as a city in tenth century Iran may not even qualify as a town in twentieth-century Europe. Another problem is that a settlement with a large population may not function as either a city or a town. For example some Yorruba settlements in western Nigeria have large populations which might imply city or at least town status yet the majority of the population are engaged in full time farming which means that they are actually "little more than over-grown village farming settlements" (cf Adams 1979, 174). A more controversial example is the neolithic settlement of Çatal Hüyük which has been interpreted as both a village and a city.

Gulick acknowledges this problem and proposes a solution based on the observation that "cities are special in the eyes of Middle Easterners and foreign observers". In order to understand this special quality Gulick enumerated three circumstances which may make a city special these are; 1) the city is now, or was at one time the capital of a major ruler, dynasty or power group, attracting wealth, 2) the city is.... the location of important religious shrines that attract pilgrims

concentrate wealth, and convey a sacred aura to the locality; and 3) the city was founded, or occupied and transformed in many ways, by foreigners bringing different life styles, imposing new patterns of behavior, and stimulating change" (Gulick 1983, 102). Whilst one or more of these attributes would fit most major Middle Eastern cities Gulick (1983, 85 and 102-3) also admits that by using the same criteria Huriedah in southern Yemen would qualify as a city even though its population was little over 2000.

Another way of dealing with the problem of urban hierarchies is central place theory whereby settlements are assessed by their functions rather than their size. According to this system cities (regional centres) are centres of long distance trade and intermediate towns are "lower order" distribution centres between regional centres and local markets. There are some problems with this approach which relies on an accurate knowledge of the urban network and trade routes and an awareness that relationships between centres change over time (see Swanson 1999, 24-5). One issue that may be worth considering in this respect is the division of city functions amongst a number of towns; for example in late medieval Pembrokeshire the functions of a city were shared by Pembroke (military centre), Haverfordwest (commercial centre) and St.Davids (cathedral and religious centre).

Planned Settlements

In the discussion of the typical Islamic city above it can be seen that there has been a tendency to characterise it as anarchic and unplanned compared with the rational layout of the European planned city. The origin and development of these ideas have been discussed in some detail above. The aim of this section is to investigate the concept of planned settlement by looking at its origins, history and variations in other traditions.

Although planned towns are present in most traditions (Classical, Byzantine, Islamic, Western Medieval, South East Asia) they have never formed a great proportion of the total. The geographer Stanislawski (1946, 105) tried to establish common reasons behind the establishment of planned cities. He identified five conditions that would enable a grid plan to develop.

1) The settlement in question must be a new town or a new part of a town
2) The planning must be under central control
3) The city is often built as a colonial enterprise
4) There should be a measured disposition of available land
5) There should be a knowledge of the grid.

Carter (1981, 151) argued that the most important of these criteria was the need for centralized political control as this was an independent variable that could be used in analysis of city plan. However the other conditions, particularly 1) and 3), are also useful for comparative purposes.

Before reviewing the origins and history of planned settlements it is worth defining what the phrase means. Generally the term refers to cities or towns which have been laid out on a rectangular or square grid although other layouts are possible such as the radial plan evident in the round city of Baghdad (see Chapter 3) or the city of Srikshetra in Burma. Another example of a radial plan was the city of Circleville in Ohio (USA) which was built on the site of an Indian settlement. It is perhaps significant that within 19 years of its foundation the radial plan was converted to the rectangular grid pattern more familiar to American cities. One can speculate the reasons for this change although it is likely that the radial plan was thought to contain too much memory of an Indian culture which they wished to suppress (see Reps 1965).

In South East Asia cities were often planned to represent an image of the universe; examples include the city of Angkor Thom in Cambodia and the city of Srikshetra in Burma.

Although there is some evidence of town planning as early as the Middle Bronze Age (see for example Ilan 1998, 309) the origin of planned cities is generally traced to the Classical, in particular Greek, world. Greek tradition ascribes the invention of city planning to Hippodamus of Miletus (fl.c.500 B.C.) although archaeologists have found rectangular orthagonal city plans from as early as the seventh century B.C. (e.g. Smyrna , near modern Izmir). Hippodamus "devised an ideal city to be inhabited by ten thousand citizens, divided into three thousand citizens, divided into three classes (soldiers, artisans, and husbandmen) and with the land also divided into three parts (sacred, public, and private)." (Fleming, Honour and Pevsner 1980, 155). Although Hippodamus was not himself an architect and did not personally supervise the construction of any cities he is generally thought to be responsible for the layout of Piraeus (the port of Athens) founded by Themistocles c. 470 B.C. Other early examples of cities with a regular layout include Olynthus built in the second half of the fifth century (Finley, 1977, 158). However regular plans were not common until the Hellenistic period with Aristotle criticising them as militarily inefficient. In the Hellenistic period (from c 350 B.C.) regular ('gridiron') city plans became common, the most famous example of which is Alexandria in Egypt. In Palestine examples of Hellenistic planning include the cities of Dor and Marissa as well as some smaller towns (see Stern 1998 437-441). Hellenistic architecture and city planning were later adopted and developed by the Romans so that regular streets intersecting at right angles became the norm . However these 'gridiron' plans were not necessarily rectangular as is often assumed. According to Collingwood and Richmond " The error is due to confusion between towns and camps. Roman towns as defined by the line of their defences are not very often rectangular in outline unless they began their life as military fortresses..." (1969, 100) .

In the Middle East Roman methods of town planning continued during the Byzantine period (324-640) "expressed in broad colonnaded, or arcaded streets" (Patrich 1998, 474; c.f. Mango 1979, 20). In Europe the situation in late antique (Dark Ages) and early medieval times was more complicated depending on the relationship of the settlement to the boundaries of the former Roman empire (Herrmann 1991 quoted in Schofield and Vince 1994, 13). In many towns there was considerable continuity of site though not necessarily of form or function (Schofield and Vince 1994, 14-16; Knight 1999, 26-37). New towns were created as early as the eighth and ninth centuries though the best surviving examples are from Wales and Gascony in the thirteenth and fourteenth centuries. The Welsh towns built by Edward I were laid out next to a castle and had regular plans divided into horizontal strips. It has, however, been suggested that the commercial life was never vigorous and that they were essentially military towns (c.f. comment by Richmond and Collingwood 1969, 100 quoted above). The *bastide* towns of Gascony have more the appearance of planned towns with three main variations of the Roman grid plan 1) Aquitaine type divided by streets into rectangular blocks sub- divided by narrow lanes, 2) Mirande type with square blocks divided by regular streets, 3) Gimont which has "two or three major parallel streets crossed by smaller transverse streets so that the blocks have a rectangular shape" (Schofield and Vince 1994, 28-35). Perhaps of more relevance to Islamic planning are the new towns established by the Crusaders in the Latin Kingdom of Jerusalem[7]. The plans of these towns have not been fully investigated although where the evidence is available the plans appear to be fairly simple based on a single main street as at al-Bira and al-Qubaiba (Pringle 1995, 72-3; Pringle 1997, 35-6 & 86-7).

The majority of urban sites have a cumulative plan which may incorporate planned elements though the final result may not be particularly regular (cf Schofield and Vince 1994, 34-5).

Questions of Population

Any discussion of urbanism must take into account questions of population. This generally involves some measure of quantification which may be dependant on one of a variety of sources. This is not an exact science and results can vary greatly depending on the source available and the methods used. Even in the modern world this poses problems thus the United Nations (1969) published a "List of definitions used in the estimation of "Urban" populations as nationally defined" (see also Carter 1981, 17). For the medieval past the problem becomes more acute thus a recent study of the population of Norwich in the 1330's has raised the population estimate by two thirds from 15,000 to 25,000 (Rutledge 1988, 27 cited in Swanson 1999, 14 n.21). With such wide variations considerable caution must be applied when discussing population figures even when there are documentary records. When there are no relevant written records archaeological methods may be applied although these have their own problems of interpretation (see Chapter 2). For the purposes of this thesis a ratio of one person per 10m² is used based on the estimate devised by Naroll (1962) using a diverse sample of known person-housing space ratios.

The absolute size of urban populations varies greatly with both time and space though not necessarily in the way one would expect. For example the city of Uruk in the Early Dynastic Period (c. 3000- 2500 BC) is thought to have had a population of 50,000 people (Adams 1979, 177) whereas three thousand years later the average town in Medieval Britain (1100-1300) had a population of less than 2000 (Swanson 1999, 14). Even if one considers the population of the largest Medieval European cities (Schofield and Vince1994, 19) such as Ghent (56,000 in 1360), London (80,000-100,000 in 1340), Cologne (40,000) and Bruges (35,000) as well as Milan, Venice, Naples, Florence and Palermo (all over 50,000 in the thirteenth century) there is still no great difference of scale. The same situation applies to the Medieval Middle East with large cities such as Damascus and Aleppo with estimated populations in the tens of thousands although there were notable exceptions such as Cairo and Baghdad both with populations estimated at half a million (N for Cairo see Lombard 1971, 26 and 138 and for Baghdad see Lassner 1970, 160, 282-3).

In view of these figures it is likely that there were certain limitations on urban size in the pre-modern period[8]. Most researchers agree that medieval urban populations were not able to reproduce themselves and were dependant on immigration from rural areas[9]. The limitations were primarily the result of two factors 1) food distribution and 2) density of settlement:

1) At its worst problems with food distribution could result in a famine. This situation was not uncommon [illegible] indicated by Braudel in the following statement [illegible] Because of the slowness and prohibitive price [illegible] transport and the unreliability of harvests, any urban centre could be exposed to famine at any time of [illegible] year" (1972,328). Although the countryside could [illegible] be exposed to famine it normally "struck only [illegible] towns" (1972, 328). Chaudhuri (1990, 370) makes [illegible] important point that famines need not only concern foodstuffs but may relate to other products. After [illegible] Egyptian famine of 1201 firewood became scarce [illegible] as Chaudhuri observes " A city without fuel was [illegible] better than one without food".

[7] There is some debate as to whether these settlements should be considered towns or villages c.f. Pringle 1995, 71 and Boas 1999, 63-5.

[8] There were limitations on urban size in the pre-modern period [illegible] the introduction of mechanized transport and industrial processes [illegible] enabled efficient food distribution to a large population.

[9] Braudel states; " Another regular feature of Mediterranean [illegible] that the urban proletariat cannot maintain itself, let alone [illegible] without the help of continuous immigration" (1972, 334) [illegible] Swanson 1999, 113 and Chaudhuri 1990, 370.

2) Density of settlement was related to on a number of factors including type of housing, street lay-out and sanitation. The two main problems associated with high density populations were fire and epidemics. Fires were more of a problem in northern Europe where timber used in construction was more plentiful whilst epidemics were potentially more lethal in the warmer climates of the Middle East[10].

Relationship to Countryside

Researchers in all disciplines no longer regard urban and rural settlements as sharply divided. The point is forcefully made in a United Nations report which stated "There is no point in the continuum from large agglomeration to small clusters or scattered dwellings where urbanity disappears and rurality begins; the division between urban and rural populations is necessarily arbitrary" (United Nations 1952).

Instead the continuities between the two forms of settlement are emphasised. For example the anthropologist John Gulick notes that "cities are special in the eyes of Middle Easterners and foreign observers" yet points out that this does not necessarily reflect the reality of daily life. In particular he states " many of the broad areas of most peoples' concerns....... are expressed in patterns of behaviour that are basically similar, when they are not identical, among city dwellers, townsmen, villagers and even pastoralists". Gulick also points out that migrants form the countryside add a rural element to many cities and towns which Hopkins (1974, 432) has called the "ruralization" of cities. However Gulick is careful in his use of this term stating "one can say that the Middle Eastern Cities have continually been "ruralized" throughout history and that "ruralization" has been a continuous process in the dynamics of the cultural heterogeneity of cities" (Gulick 1983, 136).

The interdependence of urban and rural is also recognized by archaeologists studying the origins of urbanism in the Middle East (see for example Roaf 1990, 58). The importance of this relationship can be seen by comparing the amount of agricultural land needed by the city of Uruk in the Uruk period and in the following Jemdet Nasr period. During the Uruk period the area of land required to feed the population would have been contained within a six kilometre radius, close enough to be cultivated by farmers living in the city. In the Jemdet Nasr period the population would have grown to such an extent that the land needed to support the population would have been contained within a sixteen kilometre radius, in other words the city could not have survived without food provided from other settlements.

A similar situation exists in the study of Medieval British towns thus Swanson (1999, 3) states "the idea that towns can be defined as a legally distinct entity is nowadays given short shrift, but it is not something that can be ignored completely, because it mattered to contemporaries". Later on Swanson dismisses Postan's definition of towns as 'non feudal islands in a feudal sea' by stating that they are now seen as "one expression of feudal lordship". Within the field of Islamic history the idea of an urban rural continuum was first developed by Ira Lapidus (1969, 60-69 in the face of strong opposition (see above Islamic Urbanism). For example he pointed out that cities often had an agricultural component (1969, 64-6) whilst villages had urban components. He suggested that in some cases it was more valid to talk of larger entities where "whole regions may be imagined as composite "cities" in which the population was divided into non-contiguous, spatially isolated settlements". He prefaced these observations with the statement that "in many situations, no absolute distinction between urban and rural habitats may be drawn" (Lapidus 1969,60. Although Lapidus perhaps overstated his case he did bring the study of Islamic urbanism into line with other disciplines looking at urbanism in a wider context. However this view has not necessarily filtered into archaeological studies of Islamic culture. Thus in a recent work on Islamic Archaeology, Insoll has a chapter entitled "The Community Environment" in which he mostly discusses urban settlement because of "the large scale absence of archaeological studies concerned with other [i.e. non urban] settlement types" (Insoll 1999, 202).

Conclusion

From this review it can be seen that the cultural diversity of actual towns is equalled by the range of views as to what constitutes a town. Although these problems may seem daunting it is necessary to have some working concepts of what constitutes a town in order to assess the fate of towns in Muslim Palestine. The features which appear to be particularly important in defining a town are; 1) a significant population size, 2) fortifications 3) religious buildings 4) public buildings 5) commercial buildings 6) industrial activity.

1) The most obvious criterion for urban status must be that it is a settlement with a population of significant size. Although it is possible to have a village with a very large population it is not possible to have a town with a very small population. The problem, of course, is deciding what constitutes a large population. The answer will vary depending on the culture and period in question. For pre-Modern Muslim Palestine a population of more than 1000 seems to be a reasonable minimum figure for an urban population.
2) The second criterion is that many towns will posses some form of fortification either in the form of a town wall or a citadel. In pre-modern times walls were useful not only as a form of defence but as a way of distinguishing the town from the surrounding

[10] cf Braudel, 1977,I, 332 "The cities of the East suffered its [plague] more often than others. For a full description of the progress of the plague during the Middle Ages see Dolls (1971) for a contemporary medical description of the symptoms of the plague which specifically identifies towns with the epidemic see Ibn al-Khatib translated in Ullmann 1978, 94-5).

countryside. The citadel is a symbol of military authority and may also function as an administrative and legal centre for a town.

3) The third criterion is that towns generally have at least one building for religious assembly. Usually towns will have more than one religious building and in larger towns a variety of faiths may be represented.

4) Most towns will also have a number of secular public buildings. For the Byzantine and Islamic period the most common secular public building is the public bathhouse.

5) Towns should be centres of commercial activity. Although villages, or even uninhabited areas, may have markets most commercial activity takes place in an urban environment. Within the Islamic Middle East market activity is indicated by the presence of khans, suqs, caravanserais or shop units.

6) The sixth criteria is that most towns will have some form of industrial activity. This does not have to be heavy industry such as the production of metal but it must be distinct from agricultural production. Typical industries in medieval and early Islamic Palestine include the production of pottery, metalwork, glass, textiles and jewellery.

Often the production and the sale of goods would be carried out in the same area thus jewellery would often be made and sold from the same building.

A town need not possess all of these features, though as a minimum it should have a significant size and some form of commercial activity.

3 METHODS FOR INVESTIGATING ISLAMIC URBANISM

The preceding chapter discussed approaches to the question of urbanism primarily from a theoretical perspective. The aim of this chapter is to consider methods which can be employed to investigate questions of urbanism in pre-modern Palestine. The chapter will be divided into three parts. In the first part I will consider the *Annales* approach to history and archaeology and examine how it can be of use in the design of this thesis. In the second part I will discuss Central place theory and its role in analysing the distribution of urban centres. The final part of the chapter is concerned with specific archaeological techniques and methods, which can be used for investigating urban settlements.

Part 1. Annales Theory

Whereas in pre-historic archaeology theory has become an integral part of the subject, in historic archaeology theory has only recently become important (see for example Funari et al eds. 1999). This is largely because the availability of written documents has meant that archaeological evidence can be supplemented to produce a much broader view of a particular time and place without the need for theoretical models. However this does not mean that archaeology of historic periods can operate without a theoretical approach, however rudimentary. For the purposes of this thesis the assessment of archaeological evidence will be based on the Annales approach. The suitability of this approach for historical period archaeology has been shown by Bintliff who noted that in contrast with prehistoric archaeology "the full gamut of *Annales* approaches may be employed in historical archaeology" (Bintliff, 1991,18).

Before looking at the application of the *Annales School* to the specific question of urbanism in Palestine it is useful to give a brief review of this method of historical analysis and its application to archaeology. By way of introduction it is worth quoting

Forster and Ranum who provide a list of the principal aims of the Annales School;

"(1) a comparative and interdisciplinary approach to history that attempts to "mine" the social sciences in order to fashion a "social history" in the widest sense of the term, (2) an effort to embrace the whole of human activity in a given society (*histoire totale*), and (3) a conscious rejection of narrative history and classical biography in favour of problem oriented history."

This is by no means a full definition of the *Annales* approach although it does give some idea of the type of work that may be counted as belonging to the *Annales* School.

Although there had been some dissatisfaction with traditional dynastic and biographical history as early as the late nineteenth century it was not until the early twentieth century that French historians such as Marc Bloch and Lucien Febvre had formulated a new approach to history. The *Annales School* could officially be said to have begun in 1929 with the foundation of the French journal *Annales d'histoire économique et sociale* (later renamed *Annales. Economies, Sociétés, Civilizations*). The aims of the new approach could be summarised as a turning a way from political history towards a generalizing history based on economic and social history and an openness to intellectual ideas from other disciplines. The *Annales School* became dominant in France in 1949 with the publication of Ferdanand Braudel's monumental *The Mediterranean and the Mediterranean World in the Age of Phillip II* (Paris 1949). This was soon established as the most famous work of the Annales School although it was not translated into English until 1972). For many Braudels's name has become synonymous with the *Annales School* although his work does not encompass all the approaches followed by the School and should not be regarded as its only manifestation. Other notable propents of *Annales* history include Jacques Le Goff and Le Roy Ladurie whose detailed studies of French medieval life, *Montailou* (1978) and *Carnival at Romans* (1979), have become famous beyond the confines of historical scholarship.

The adoption of the Annales approach in the English speaking world can be dated to the 1970's after the translation of Braudel's work on the Mediterranean. For example in 1975 Forster and Ranum published selected articles from the *Annales* in order to explain the approach to American historians (Forster and Ranum 1977). Prominent examples of English language works in the *Annales* tradition include Walerstein's *The Modern World System* (New York 1974) and Chaudhuri's work on the Indian Ocean (Cambridge 1990). The attraction of this approach to archaeologists is obvious with its emphasis on diverse forms of historical evidence; indeed according to this approach "Archaeology is an absolutely integral part of history (Olivier and Coudart 1995, 364; see also Febvre 1938(1973)). *Annales* history is also suitable for archaeology because of its conscious rejection of narrative history which has so often made archaeological and historical evidence virtually incompatible (for example narrative history has tended to show that the Islamic conquests were a decisive, perhaps destructive phase in the history of the Middle East whereas archaeological evidence indicates considerable continuity.

Despite its appeal the Annales paradigm was not adopted as part of Anglo-American archaeological theory until the late 1980s although it remained integral to French archaeology (Olivier and Coudart 1995, 364). The early nineties saw the publication of two edited volumes *The*

Annales School and Archaeology (Bintliff 1991) and *Archaeology, Annales and Ethnohistory* (Knapp 1992) examining the application of Annales theory to archaeology. Both books largely deal with examples from historic period archaeology because its application to prehistoric archaeology is more problematic (cf Bintliff 1991, 18).

Having briefly reviewed the history of the *Annales School* it is worth defining what is meant by the term and how it affects our approach to archaeology and history. Different writers have different views on what constitutes *Annaliste* history. For some the main feature of the *Annales* School is its method of structuring time into three wavelengths as exemplified by Braudel. Others, however, deny that the School has any particular ideas or structures suggesting instead that it has certain general characteristics. For example the Islamic historian Richard Bulliet believes that the school is characterised by the use of "innovative techniques, orientation towards solving problems, experimentation with intractable and non-traditional data, and great diversity in seeing that the human past can be reconstructed in myriad ways"(1992).

Although there is some debate as to what constitutes Annalist thought it is clear that certain concepts play a key role, these have been conveniently summarised by Bintliff (1992, 1-33) as follows: 1) time, 2) *mentalités* and 3) problem history. 1) Probably the most well known aspect of *Annales* theory is its approach to time as elaborated by Braudel in his work on the Mediterranean. He divided time into three main frequencies i) long term, almost imperceptible, change (longue durée) ii) medium term changes (moyenne durée) and iii) short term changes (événements). The first frequency involved long term phenomena such as geographical features, climate change, traditional technologies or ideologies. The second frequency, characterised as impersonal and collective forces which can be dated, includes phenomena such as agrarian cycles and socio-political systems. The third frequency operates at the level of individual human experience and includes events dealt with in traditional political and narrative history. There are a number of criticisms of Braudel's application of these frequencies although the concept itself has generally been praised. The suitability of this approach to archaeological research is clear where excavated material may not relate directly to the short-term history (événements) but may have implications for medium (moyenne durée) or long-term (longue durée) changes. Indeed the relationship between documentary history recording specific events and historical archaeology could be seen as the relationship between the three wavelengths.

2) The second concept derived from *Annales* methodology is that of *mentalités* or the study of ideologies and collective systems of belief. Although this is generally absent from Braudel's work (indeed he appears to deliberately ignore this in his work on the Mediterranean for example making no distinction between areas under Islam and those under Christianity) both Marc Bloch and LeFebvre saw this as an essential way to escape deterministic explanations of history.

3) The third concept identified by Bintliff is the problem-oriented approach to history (*histoire problème*). Although this is found in Braudel's work it was developed by other French scholars notably Ladaurie and Blois. This approach starts with a problem or question and then seeks to answer it using a full array of historical data addressed at the three wavelengths. Thus a particular problem or immediate situation can be the result of long-term processes as well as very particular circumstances. The value of this approach is that it allows one to see the complexity of historical processes.

So far the discussion has been focussed on the history and character of the Annales School and its potential application to archaeology. In the final part of this section I would like to consider its relevance to Islamic archaeology in general and the specific issue of Islamic urbanism in Palestine. Andrew Sherrat (1992,138) has criticised the *Annales* approach for its Eurocentrism that he sees as a replacement for nationalism which is out of fashion in post-World War II Europe. However, this may be a symptom of a more general neglect of historical research on non-western societies rather than a particularly narrow view of the *Annales* School. For example as early as 1969 the Annales journal published an article by Richard Bulliet on the disappearance of wheeled vehicles in the Middle East[1]. Sherrat himself also points out that one of the major works of the *Annales* school, Lombard's *Etudes d'économie médiévale* (Lombard 1971; 1974; 1978), is concerned with the Arab/Islamic world. Other *Annales* inspired work concerned with the Middle East and Islamic world includes Chaudhuri's two volume study of the Indian Ocean. In many ways Middle Eastern and Islamic history is particularly suited to the *Annales* approach with its range of historical sources (e.g. Geniza documents, biographical dictionaries) that differ markedly from the traditional western sources. The application of the *Annales* approach to Islamic archaeology has been more limited although there has been some interest most recently from Bulliet (1992) and Insoll (1999). By looking at pottery styles from Nishapur in North-East Iran Bulliet suggests that "the societal change that accompanied the progress of religious conversion in Khurassan appears to have gone beyond doctrine and affected the fabric of everyday social intercourse and popular taste". The influence of the *Annales* school on this work was summarised by Bulliet as the "simultaneous freedom to explore non-traditional sources... and encouragement to resort to theory"(1992). Insoll on the other hand interprets *Annaliste* methodology in a different way in his book *The Archaeology of Islam* (1999). He focuses primarily on Braudel's three wave lengths which he states "ideally suits what we are trying to explore here".

[1] Later expanded and published as a book Bulliet 1975.

For the purposes of this thesis three *Annales* concepts identified by Bintliff will be used: Braudel's concept of time, the study of ideologies (*mentalités*) and problem history. The concept of time operating at three wavelengths will be a useful way of dealing with the large span of time from the seventh to the sixteenth century (1000 years). In particular it may help with the problem of relating extended archaeological time spans to very specific events as described in historical sources.

The study of *mentalités* will be a useful way of dealing with the shift in belief systems from Christianity to Islam and also from the concept of Late Antiquity to medieval. Problem history, which most commentators agree to be a central feature of the *Annales* approach, will be the driving concept behind the work. The principal question is why the number of towns in Palestine declined from over forty in the Late Byzantine period to just six at the end of the sixteenth century. Other problems or questions include 1) what effect did the Crusades have on urbanisation? 2) Does Islamic urbanism in Palestine differ from other forms? 3) Does Mamluk urbanism differ from that of earlier periods? 4) Is the picture presented by archaeology the same as that presented through written historical records.

Part 2. Central Place Theory

Any discussion of urbanism must consider Central Place theory. Even though its direct application in the current context is likely to be limited, the influence of the theory is considerable and shapes our perception of urban (and rural) relationships. The theory is primarily a product of urban geography and its significance for the subject can be gauged from the following statement " if it were not for the existence of central place theory, it would not be possible to be so emphatic about the existence of a theoretical geography... this author is of the opinion that the initial and growing beauty of central place theory is geography's finest intellectual product" (Bunge 1962, 129 cited in Carter 1981, 139). During the seventies and early eighties geographers were less enthusiastic about the theory although the advent of GIS (Geographical Information Systems) has once more made it relevant.

The theory has many roots although the invention is generally attributed to the German Walther Christaller who explained his theory in a book entitled *Die zentralen Orte in Suddeutschland (Central Places in southern Germany)* published in 1933. The book is divided into three sections, a theoretical part, a connecting part and a regional part. The last two sections are concerned with the practical application of the theory; the connecting part introduces methods of applying the theory and the regional part discusses the results of the work in southern Germany. Whilst the theoretical first part of the book has been hugely influential the two later sections have largely been disregarded as the methods of application were flawed (Carter 1981, 59). The aim of the theory was to answer a question which Christaller used as the title for his introduction "Are there laws which determine the number, distribution and size of towns?". In other words he wanted to establish a scientific, deductive method for analysing the distribution of towns. His theory was based on the assumption that the primary function of towns is to act as central places for the countryside, providing goods and services. Christaller made the significant observation that population size was irrelevant to a town's centrality, in other words a town could be important because of the size of its population but without providing goods and services it was of no consequence (c.f. for example the difference between large villages and small towns). The theory was developed using two related propositions: 1) a population must reach a certain size before it can offer certain goods or services. Geographers currently refer to this as the *threshold population*; 2) there is a maximum distance people are prepared to travel for particular goods or services before either the travel becomes too expensive (eg. time, money and inconvenience) or an alternative nearer centre is available.

From these premises Christaller worked out an ideal distribution based on an isotropic (flat, uniform) surface with an even population density and no variation in wealth or poverty. First he worked out a ranking of settlements determined by which goods or services they could offer based on the threshold population principle. He then calculated spacing based on the range of goods and services offered at each settlement. The pattern that emerges is of each town surrounded by six settlements of equal importance to itself, evenly spaced around a circle. Christaller had seven ranks of town with specified ranges of influence although as Carter (1981, 62-3) points out actual distances should not form part of a theoretical construct. The area around each town was called a complimentary region (zone of influence) and although described by a circle in practice its form is modified to a hexagon by the interaction with other complimentary regions. According to this model each town served its own area and an area equivalent to that of two other settlements of similar size. This arrangement was called a rule of threes and was expressed as a constant $k= 3$. Christaller also contemplated other spatial arrangements $k= 4$ and $k = 7$ each expressing a different form of relationship (**See Fig. 3, 10** and **19** which use k=3).

Christaller's ideas were supported by the work of August Lösch (1954) who first published his work *Economics of Location* in 1939. As indicated by his title Lösch was more interested in economic production than settlements although the results he arrived at using different methods were remarkably similar to those of Christaller. He extended the work of Christaller by demonstrating that there were more than three spatial arrangements available and extended the series of constants to increase market areas.

Whilst Lösch's research re-enforced Christaller's theory other researchers produced work which posed serious problems the most significant of which were "Rank Size Rule" and "Primate City distribution". The Rank size rule was published in English by George Zipf in 1949 based

on the ideas of Felix Auerbach first published in 1913 (Auerbach 1913). According to this theory the population of a town multiplied by its rank was equal to the population of the largest city. From this rule, which was a product of empirical observation, there is no stepped ranking, instead there was a continuum from small to large settlements. This caused problems for Central Place theory which was dependant on distinct classes of settlement to make the structure work. The notion of the Primate City was formulated by Mark Jefferson in an article published in 1939. The principle idea of this theory is that "the largest city shall be super eminent and not merely in size but in national eminence" (Jefferson 1939). This idea was based on observations of historical situations and naturally clashes with ideas of distribution and ranking of settlements implicit in Central Place theory. The two main problems are 1) that Central Place theory does not appear to take into account settlements of this type and 2) Central place theory is static and has no historical dimension. Observations of areas where the Primate City rule is evident have indicated that its effect is much stronger in early stages of urbanisation and becomes less as civilization becomes more complex.

In addition to the theoretical problems posed by Zipf (1949) and Jefferson (1939) the theory also had serious practical problems. The most obvious of these was that the hexagonal lattices postulated by the theory had nowhere been convincingly identified. Other problems were; 1) that the theory had a strong deterministic element which is neither reflected in the behaviour of individuals nor in the historical process and 2) the model was solely economic ignoring other influential forces.

Despite these problems Central Place theory is still one of the most widely used approaches to understanding settlement distribution. Its importance has been maintained because considerable effort has been spent trying to make it more accurate and relevant. Empirical studies which have been carried out using the theory have shown that problems of ranking settlements as identified by the size rank rule can generally be dealt with if an area is broken down into local areas where distinct ranks are visible. However the implication of this finding is that the results of any Central Place analysis are necessarily limited in their wider relevance. There have also been attempts to extend the use of the theory so that it has also been applied to intra- urban distribution.

The above review of Central Place theory considers it mostly as a tool of urban geography and as such mostly concerned with the present. Attempts to use the theory for historical studies have had limited success (Swanson 1999, 24-5) although its use in archaeology is more widespread (see for example Dever 1998, 418). There are however special problems when applying this theory to the study of the past. One problem that has been alluded to above, concerns the fact that classical Central Place theory allows no room for evolution of settlement patterns and as such is a static system. One solution is to build the concept of evolution into the model so that stages in the development of an area are generalized. This of course has its own problems and is subject to changing views of the past thus John Webb proposed a scheme which included the concept of the "isolated city" as one stage in the development of a system. The idea of the "isolated city" was based on the assertion that there was little interaction between urban centres in medieval Europe (Webb 1959, 56 and Carter 1981, 134). Such a proposition would today carry little weight so that the whole model would be flawed. There are, however, some more convincing models less dependant on specific data. For example Carter (1981, 136) proposes " a conceptual framework which summarises the various influences on the locational pattern". The framework is time based and postulates that two types of settlement develop, those dependant on specific locations and those which develop as a result of central place functions. This forms a system which may then be modified by "technological and organizational changes" and "minor exogenous influences". There are also examples of successful applications of central place theory to particular historical situations such as Chris Dyer's work on the small towns of central England during the Middle Ages (Dyer 1966). This region is ideally suited for the study because it has a fairly uniform geography and has no major cities such as London to distort the picture (in may ways the area resembles southern Germany used in Christaller's original formulation of the theory).

Within this thesis Central Place Theory will be used to indicate the changing patterns of settlement from the Early Islamic period to the medieval period (**Figs. 10** and **19**). Three changes are particularly notable 1) a decrease in the total number of towns, 2) a decrease in the number of ranks of town and 3) a spatial shift eastwards.

Part 3. Archaeological Techniques

The archaeology of towns in Palestine during the Islamic period is susceptible to the same range of techniques as those used for medieval urbanism in Europe although for a variety of reasons they are not always deployed. The reasons may be summarised as follows;

1) Unlike much of Europe (particularly northern Europe) the quantity of material encountered during archaeological investigations is very large. In many cases this means that the available resources for studying material from a particular site is severely limited.
2) Because of Palestine's position in world culture interest in its archaeology has tended to focus on the older periods, particularly those associated with the Bible. The only post Classical period to attract significant attention is the time of the Crusades which again has a link to the wider European world.
3) Like much of the Middle East Palestine has been subject to considerable political discontinuity (during the twentieth century certain parts of the country have been subject to successive Ottoman, British, Jordanian, Egyptian Israeli, and now Palestinian governments).

The discontinuity has meant that archaeological policy has lacked the stable base which it needs to develop.

4) Much of the archaeological field work in Palestine has been carried out by Israeli or foreign archaeological missions which, for reasons outlined in 2) above, have generally been more concerned about older (i.e. non-medieval) periods.

Archaeological techniques may, for convenience, be divided into two broad categories based on their method of obtaining data, these are excavation and survey. Of course most techniques may be used in either situation though they are usually more common for one or the other (for example environmental information is normally associated with excavations).

Survey Techniques

Surveys are generally cheaper, less time consuming and non-destructive; however, their application to medieval sites in the Middle East is generally restricted to field-walking and architectural survey. The other more sophisticated techniques are less used either because they require equipment not easily available in the region or because they are not allowed for security reasons.

Field walking is the most simple form of survey which has always formed a basic technique of Middle Eastern archaeology. However the application of field-walking to urban sites is often limited either where an urban site is still functioning or where it has been obscured by modern development. There are, however, some urban sites which are protected from modern development and where field walking has been successful. Prominent examples include the survey of Samarra in Iraq (Northedge 1985 and 1993) and recent surveys of Merv in Turkmenistan (Herrmann et al 1996 and 1997). However in the majority of medieval urban sites the area available for surface survey is limited although there will usually be some areas where fragments of pottery, glass and other finds may be encountered. The problem here, of course, is in assessing to what extent the surface remains reflect what is buried beneath or whether the material is re-deposited from elsewhere for example the early Islamic city of Fustat became a rubbish dump for later medieval Cairo (this is particularly a problem in areas where mud-brick and pisé have been used and may incorporate sherds of pottery from elsewhere). In Palestine the number of medieval urban sites which are susceptible to surface survey are limited though it can be of use as an indication of continued use of an older site (for example in some of the Negev cities cf. Magness 2000).

Architectural or building survey is one of the main techniques employed in Islamic archaeology and is a method particularly suited to urban sites. Most of the major medieval Muslim cities have been the subject of detailed architectural surveys and in some cases this has led to sophisticated analysis of urban form (see for example Roujon and Vilan (1997) who have analysed the Damascus suburb of Midan). In Palestine only Jerusalem and Gaza have been the subject of detailed architectural studies though there have been surveys of other towns such as Hebron, Safed and Nablus which are either incomplete or unpublished. In general such surveys tend to concentrate on buildings known either through documents or inscriptions and many of the anonymous domestic or industrial buildings remain unpublished giving a rather skewed impression of medieval architecture in Palestine. The other observation is that such surveys often approach buildings as architectural statements of a particular time rather than as buildings which have a cumulative history.

Geophysical survey is a relatively new technique and its application to medieval sites in the Middle East is fairly limited (for a review of its use in the Mediterranean see Saris and Jones 2000). The principal technique used is magnetometry as this is relatively quick and therefore able to cover large areas relatively cheaply. Resisitivity is generally too slow and magnetic susceptibility is only concerned with indications in the topsoil. Ground penetrating radar may also have some applications for finding large features such as town walls although its weight make it cumbersome and expensive to use (Clark 1996, 118-20). The use of geophysical survey on urban sites shares some of the limitations of field-walking discussed above as well as having some of its own limitations. In particular there is the problem that many urban sites are deeply stratified and most geophysical techniques are not capable of measuring features more than one metre below the ground surface. There is also the associated problem that the complex nature of many urban sites will not produce a readable pattern. Other problems include the fact that many urban sites are contaminated with modern highly magnetic material which will mask any readings from older remains. However geophysics has been useful in defining areas of ancient industrial use at sites such as Merv (Herrmann et al 1997, 17). The increasing sophistication of computers and refinements in prospection methods means that such techniques may have more value in the future.

Topographic survey (the description or delineation of physical features of place or locality) on the other hand is a traditional technique in a archaeology and one that has been applied to most major sites in the Middle East since the nineteenth century. The application of topographic survey to urban sites which are still built up today has generally been more problematic. In general archaeologists are forced to rely on maps produced by other agencies where the refinement of contours or the delineation of ancient features may not have the degree of accuracy required. The recent development of surveying techniques using computerised Total Stations (EDM) and software has made detailed urban survey possible (see Ramla below).

Allied to topographic survey is remote survey using aerial photography and more recently satellite and shuttle images. Aerial photography was deployed in archaeology fairly soon after the First World War. Notable early aerial

archaeologists include Antoine Poidebard (1934) who worked in Syria and Sir Auriel Stein who worked in Transjordan and Iraq (Kennedy 2000). More recently the tradition has been continued by David Kennedy and the late Derrick Riley both of whom focused on Roman remains in Arabia and the Levant (Kennedy and Riley 1990). Another approach to aerial archaeology has been to use photographs taken for other purposes (primarily military) for the interpretation of sites particularly where the landscape has changed since the photographs were taken. In Israel/Palestine Benjamin Kedar has made use of German First World War photographs for the identification of medieval sites (Kedar and Pringle 1985). The largest scale application of aerial photographs for an Islamic site has been for the mapping of the Samarra in Iraq where vertical RAF photographs have been used to map the ancient remains (Northedge 1989). With the development of GIS (Geographic Information Systems) aerial photographs can now be combined with other forms of information including geophysical and topographic surveys to produce detailed archaeological maps of sites (see discussion of Ramla).

Excavation techniques

Archaeological excavations have been carried out in Palestine since at least the nineteenth century though the techniques of excavation were either unsystematic or too large scale to produce results of use for later periods. In the twentieth century systematic methods of excavation developed the most notable of which is the box trench system devised by Mortimer Wheeler and refined by Dame Kathleen Kenyon. The principle aim of this technique was to record the stratigraphic sequence of a site (usually a tell site) in order to date particular cultural layers. This technique has continued to be the dominate method of archaeological excavation in Israel despite the fact that in most other places it has been superseded by open area excavation (see Plate 42 for Israeli excavation in progress). The obvious problems with the box trench system include 1) large parts of the excavation area remain unexcavated 2) it is often difficult to follow features form one trench to another 3) the stratigraphic link between different trenches cannot be taken for granted. These factors become particularly problematic when dealing with medieval urban sites where the emphasis is to understand what happened during a particular phase rather than establishing a long stratigraphic sequence. Occasionaly other techniques are used sometimes with spectacular success as in the excavations At Beth Shean (Baysan, Scythopolis) where the needs of employment and tourism combined to open large areas of the site for public display.

Ceramics

The study of ceramics is one of the most studied aspects of Islamic archaeology yet there are still considerable problems both in dating and provenancing material. There are two main reasons for this situation;

1) The first is that the study of Islamic pottery has been pioneered by historians of Islamic art rather than archaeologists, with a consequent emphasis on fine glazed ceramics to the detriment of coarse wares.
2) The second reason is that when pottery from the Islamic periods is excavated it is usually part of an excavation which is primarily concerned with earlier material hence it has not received the attention which it deserves.

The dating for pottery of the Islamic period is generally fairly imprecise and dating of a particular ware is within a range of fifty or a hundred years rather than tens of years for comparable material from the Roman period. Two periods cause particular problems, the first of these is the early Islamic period (seventh - ninth centuries) where a range of Byzantine (sixth - seventh century) types continue with little change. In the past this has led to problems in identifying sites with occupation after the Arab conquests. The problem is that Israeli archaeologists have based their dating on the ceramics of Khirbat al-Mafjar published by Baramki (1942) assuming that all the pottery from this site dates to the Umayyad period (i.e. before AD 750). However recently Whitcomb (1989a) has shown that a much longer time span is represented by the pottery at Khirbat al-Mafjar and that many types thought to be characteristic of the early Islamic period in fact date to the mid-ninth century or later. Whitcomb's conclusions are supported by other archaeologists working in Jordan most notably Walmsley (2001) and are now largely recognized by Israeli archaeologists who have revised their dating. However this still leaves the problem that many excavations which took place in the past will have to be re-dated (cf. Magness 2000).

The second area where there are considerable problems concerns the dating of hand made painted wares which have a date range from the twelfth to twentieth centuries. A number of attempts have been made to determine chronological groups though none have been particularly successful probably because of significant regional variations (for a recent discussion see Johns 1998).

Beyond using pottery as a dating tool there is also the question of its value as a social and economic indicator. A few attempts have been made to relate it to social conditions the most notable of which is Bulliet's attempt to link glazed pottery styles with particular social groups in tenth century Khurassan (1991). More recently Marcus Milwright has attempted to link pottery styles with particular social groups in Mamluk Syria (Milwright 1999).

Glass

After pottery glass is the most frequently encountered type of material found on Islamic sites. Technologically glass-making in the Islamic world preceded that of Western Europe, in particular in its development of glazes which were applied to pottery. Three distinct categories of object were made of glass: vessels, window

NS IN BYZANTINE PALESTINE

ority of towns in Byzantine Palestine were ions of settlements that had existed in Roman d before (see **Fig. 6** for distribution map of Mango 1978, 20). Thus there were no new cities from the Byzantine period though some villages ed to a civic status by becoming regional ative centres (Patrich 1998, 474).

iew of the Byzantine period will consider three s which are important for an understanding of in the Islamic period these are; 1) the extent of fluence 2) the evidence for Arab culture in the re the Islamic conquest 3) signs of decline and ity.

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in distinguishing factor between the Muslim and ne periods is in the role of Christianity as the state . Under Byzantine rule the church had been a influence on the development of towns. The s influence was expressed in three main ways: 1) elopment of Palestine as the Holy Land 2) the rise ks and monasticism 3) the role of the church as a of building.

tine as Holy Land

doption of Christianity as the official religion of the e changed the status of Palestine from an obscure ince to a Holy Land. This was made clear soon after when Constantine ordered the destruction of the ple of Venus and the construction of a Christian ica (Church of the Holy Sepulchre) on the site son and Taylor 1994, 73; Eusebius *Vita Const.* III, ; Mango 1978, 15-6). Also at this time Constantine's er made a pilgrimage to Palestine and founded a ber of churches. Eusebius himself contributed to the ess by compiling the *Onomasticon* that is a list of and their Biblical associations. Pilgrimage soon me an established practice amongst the Byzantine lity in the late fourth century (Hunt 1972, 312-460). practice continued in the fifth century and by the century it appears to have been a major industry ing from the number of pilgrimage tokens found (see example Vikan 1982). Averil Cameron summarised situation as follows, 'In this period one might say that rimage was booming, whether to Holy places selves, or to the shrines of saints or holy men...' 93, 77).

growth of pilgrimage to Palestine obviously had an ct on the economic and physical development of its es. The importance of Jerusalem for example was eased to the extent that in the mid fifth century a new l ('Eudocia's wall) was added extending the city to south (Reich, Avni and Winter 1999, 138). A century later in 543 the emperor Justinian built the Nea (New) Church, dedicated to Mary Mother of God. This was a massive ecclesiastical complex of a size and splendour appropriate to the city that was at the heart of the Christian religion. Other Palestinian cities and towns were also included in this growth for example the city of Gaza was provided with a cathedral by the Empress Eudocia in 406 (Mango 1978, 16) and in the sixth century the celebrated church of St. Sergius was built (Hamilton 1930). Outside the cities shrines were established at places of Biblical importance and thus assumed an urban character for example Bethlehem was provided with walls by Justinian c. AD 531 (Procopius *De Aedificus* v.9.12; Prag 2000, 179-80) despite the fact that the church was not the seat of a bishop (Pringle 1993, 138).

2. Monks and Monasteries

A similar process can be identified in the development of monasteries in the Judean desert. These have recently been systematically documented by Y. Hirschfeld (1990; 1992a; see also Patrich 1994) who recorded at least 64 monasteries (twice the number previously known). He notes that monasticism in the area reached its peak in the sixth and early seventh centuries. John Binns (1999) has argued that the proliferation of monasteries (both *coenobium* and the *laura*) in the area which together were capable of housing 3000 monks amounted to a process of urbanisation. This was significantly different from monasticism in Egypt as exemplified by the monastery of St. Anthony where monks were consciously escaping the life of the city. In Palestine it is notable that the Judean monasteries were located near cities such as Jerusalem and Jericho. According to Binns "It seems...that the growth of the Palestinian monasteries cannot be understood only as an ascetic flight from the world, although we are left in no doubt that the monks loved the wilderness and emptiness of the desert, it was also a process by which new cities were built" (Binns 1999, 29). As support for this idea Binns notes that Sabas was given the title *archimandrites,* a title which has quasi-episcopal meaning, at a time when bishops always exercised authority over a city[1]. In this context Sabas title and authority over the desert monasteries "confirms the impression that the monasteries were seen as together constituting a city" (Binns 1994, 175-77; Binns 1999, 30). Binns further suggests that one of the reasons for locating the monasteries in the Judean desert area was part of an imperial policy of settling frontier areas "Thus... Sabas was participating in the process of building up the Empire by colonising areas which had previously been left unoccupied " (1999, 29). A parallel development was the growth of cities/towns in the Negev which will be discussed further below.

[1] This was not always the case in Africa some agricultural estates had bishoprics.

3. TOWNS IN BYZANTINE PALESTINE

The majority of towns in Byzantine Palestine were continuations of settlements that had existed in Roman times and before (see **Fig. 6** for distribution map of towns) (Mango 1978, 20). Thus there were no new cities (*poleis*) from the Byzantine period though some villages were raised to a civic status by becoming regional administrative centres (Patrich 1998, 474).

This review of the Byzantine period will consider three questions which are important for an understanding of urbanism in the Islamic period these are; 1) the extent of church influence 2) the evidence for Arab culture in the area before the Islamic conquest 3) signs of decline and prosperity.

The Church

The main distinguishing factor between the Muslim and Byzantine periods is in the role of Christianity as the state religion. Under Byzantine rule the church had been a major influence on the development of towns. The churches influence was expressed in three main ways: 1) the development of Palestine as the Holy Land 2) the rise of monks and monasticism 3) the role of the church as a patron of building.

1. Palestine as Holy Land

The adoption of Christianity as the official religion of the Empire changed the status of Palestine from an obscure province to a Holy Land. This was made clear soon after 324 when Constantine ordered the destruction of the Temple of Venus and the construction of a Christian basilica (Church of the Holy Sepulchre) on the site (Gibson and Taylor 1994, 73; Eusebius *Vita Const.* III, 34-9; Mango 1978, 15-6). Also at this time Constantine's mother made a pilgrimage to Palestine and founded a number of churches. Eusebius himself contributed to the process by compiling the *Onomasticon* that is a list of sites and their Biblical associations. Pilgrimage soon became an established practice amongst the Byzantine nobility in the late fourth century (Hunt 1972, 312-460). The practice continued in the fifth century and by the sixth century it appears to have been a major industry judging from the number of pilgrimage tokens found (see for example Vikan 1982). Averil Cameron summarised the situation as follows, 'In this period one might say that pilgrimage was booming, whether to Holy places themselves, or to the shrines of saints or holy men...' (1993, 77).

The growth of pilgrimage to Palestine obviously had an effect on the economic and physical development of its cities. The importance of Jerusalem for example was increased to the extent that in the mid fifth century a new wall ('Eudocia's wall) was added extending the city to the south (Reich, Avni and Winter 1999, 138). A century later in 543 the emperor Justinian built the Nea (New) Church, dedicated to Mary Mother of God. This was a massive ecclesiastical complex of a size and splendour appropriate to the city that was at the heart of the Christian religion. Other Palestinian cities and towns were also included in this growth for example the city of Gaza was provided with a cathedral by the Empress Eudocia in 406 (Mango 1978, 16) and in the sixth century the celebrated church of St. Sergius was built (Hamilton 1930). Outside the cities shrines were established at places of Biblical importance and thus assumed an urban character for example Bethlehem was provided with walls by Justinian c. AD 531 (Procopius *De Aedificus* v.9.12; Prag 2000, 179-80) despite the fact that the church was not the seat of a bishop (Pringle 1993, 138).

2. Monks and Monasteries

A similar process can be identified in the development of monasteries in the Judean desert. These have recently been systematically documented by Y. Hirschfeld (1990; 1992a; see also Patrich 1994) who recorded at least 64 monasteries (twice the number previously known). He notes that monasticism in the area reached its peak in the sixth and early seventh centuries. John Binns (1999) has argued that the proliferation of monasteries (both *coenobium* and the *laura*) in the area which together were capable of housing 3000 monks amounted to a process of urbanisation. This was significantly different from monasticism in Egypt as exemplified by the monastery of St. Anthony where monks were consciously escaping the life of the city. In Palestine it is notable that the Judean monasteries were located near cities such as Jerusalem and Jericho. According to Binns "It seems...that the growth of the Palestinian monasteries cannot be understood only as an ascetic flight from the world, although we are left in no doubt that the monks loved the wilderness and emptiness of the desert, it was also a process by which new cities were built" (Binns 1999, 29). As support for this idea Binns notes that Sabas was given the title *archimandrites,* a title which has quasi-episcopal meaning, at a time when bishops always exercised authority over a city[1]. In this context Sabas title and authority over the desert monasteries "confirms the impression that the monasteries were seen as together constituting a city" (Binns 1994, 175-77; Binns 1999, 30). Binns further suggests that one of the reasons for locating the monasteries in the Judean desert area was part of an imperial policy of settling frontier areas "Thus... Sabas was participating in the process of building up the Empire by colonising areas which had previously been left unoccupied " (1999, 29). A parallel development was the growth of cities/towns in the Negev which will be discussed further below.

[1] This was not always the case in Africa some agricultural estates had bishoprics.

3. The Church as a patron of building

One of the characteristics of the Byzantine period is the involvement of the church in all aspects of public life. Bishops were the main representatives of the church and as Averil Cameron has observed " As time went on bishops became more, not less, important." (Cameron 1993, 63). One of the ways in which the increasing role of bishops in civic life can be documented is their appearance in building inscriptions. A recent study of these inscriptions by Di Segni has shown how the proportion of religious to secular buildings changed over four and a half centuries between AD 350 and AD 800. During the fourth century only a few churches were built and during the fifth century they begin to feature prominently and from the reign of Justinian (527-565) onwards they outnumber civil building inscriptions. The total for the whole period for the area of modern Israel/Palestine (Di Segni 1999, 160 Tables 2A-B) is 57 churches (not including 5 synagogues) and 22 civil buildings (i.e. nearly 3:1). When the whole area of Israel/Palestine, Jordan and Provincia Arabia is considered (Di Segni 1999, 163 Table 5) the proportion alters slightly with 112 churches and 55 civil buildings (i.e. roughly 1:2) though the general pattern of more churches than civil buildings holds true for the whole area (Di Segni 1999, 159-165). It should perhaps be pointed out that Di Segni's survey only refers to Latin and Greek inscriptions so that from the time of the Islamic conquest 634 to 800 churches are virtually the only buildings documented because other public works are commemorated by Arabic inscriptions.

The increasing numbers of inscriptions relating to churches is much as one might expect as Christianity became more established in the empire. What is remarkable is the number of inscriptions from secular buildings which indicate the increasing involvement of the church. For example the archimandrite St. Sabas made a request to the emperor to build a fort in the desert which was subsequently built at a cost of 1,000 soldi (Di Segni 1999; Cyril of Scythopolis ed. Shwartz 72-3). A similar interest in fortification was shown by Bishop Marcianus of Gaza in the early sixth century (before 536) when he instigated the rebuilding of the city walls (Di Segni 1999, 154; Glucker 1987, 140-1). More direct involvement in the construction of public buildings can be seen in the establishment of a network of inns and hostels (ξενεωνες). Examples in cities include the two hostels attached to the Nea Church in Jerusalem one for pilgrims and the other which functioned as a type of hospital. It appears that many of the inns outside cities were located near a fort or other military camp which Di Segni has taken to be evidence for "the increasing involvement of the church in all aspects of life, especially in the smaller cities and the villages" (1999, 154). Within the cities the church was involved in the construction of a variety of secular buildings. The church's interest in bath-houses can be seen in the construction of a public bath in Jerash by Bishop Placcus in 454/5. Other examples include the restoration of a bath-house in Scythopolis (Beth Shean/Baysan) by Bishop Theodore in 558/9 and the restoration of the *thermae* at Hammat Gader which was dedicated to saint Elijah (Di Segni 1999,56). Other public buildings erected under the authority of the church include the stoas erected by Bishop Marcianus of Gaza (Di Segni 1999, 157; Choricius edd. Foesteer & Richtsteig) and a colonnaded street at Sepphoris. The involvement of Bishop Eutropius in the building of the colonnade at Sepphoris is recorded in a recently discovered mosaic pavement (Di Segni 1999, 157; Netzer and Weis 1999). More surprising perhaps is the church's involvement in the construction of a gaol for prisoners awaiting execution (Di Segni 1999,158)

The increasing role of the church in public life, particularly from the sixth century, has important implications for the period after the Islamic conquest. Although churches clearly continued to function and were repaired and even founded after the Arab conquest the Church's official role in the state was obviously at en end.

Arabs Prior to the Muslim Conquest

The influence of the Arabs in the area before the Muslim conquests has received increasing attention in recent years and is of significance when assessing the nature of the change from Byzantine rule.

This research may be divided into three main strands; the first is an increased interest in Roman Arabia (see for example Bowerstock 1983 and more recently Lozachmeur ed. 1995), the second is an examination of the role of Arabs in the Byzantine army (e.g. Shahid 1995, Whittow 1999) and the third is concerned with elements of continuity from the Byzantine to the early Islamic period (e.g. Pentz 1992). Much of this new research has been fuelled by archaeological investigations that have added much to the difficult documentary evidence.

Before considering the role of the Arabs in the region prior to the Islamic conquests it is worth defining the term Arab. For some it is an ethnic term and for others it applies only to those engaged in pastoral nomadism. The meaning of the term is subject to change depending on the period and the point of view of the person using the term. In the present context one may use the term to mean "those who see themselves and are seen by others as participating members of Arab culture" (Whittow 1999, 219). This meaning is particularly appropriate because it emphasises the sentiments of belonging to a particular society rather than the economic occupation or style of living.

1. Arabs in the Byzantine Army

Perhaps the most intensively studied area of research is the military role of the Arabs in the late Roman/ Byzantine state. This field has been dominated by the work of Irfan Shahid that has highlighted the role of the

Christian Arab tribes, in particular the Ghassanids, in defending the Byzantine empire against the Persians. Shahid has argued that Greek historians, in particular Procopius, played down the significant role of the Arabs because of their adherence to Monophytism and because they were regarded as barbarians. Shahid's views have drawn criticism from a number of scholars most notably Whitby who states "The lack of information in Greek historians about Arab affairs in the late sixth and seventh centuries accurately reflects their lack of importance in contemporary wars and diplomacy" (Whitby 1992, 80). While Shahid's historical interpretations of the role of the Arabs in the Persian wars may appear to be stretched in places the role of the Arabs in the Roman and Byzantine military is not disputed (see for example Kaegi 1992, 52-56). Their role in the Byzantine military may be divided into two main categories. In the first category are Arabs who served in the Byzantine army either as individuals or as part of an ethnically defined unit. In the second category are Arab tribes that functioned as clients of the Byzantines, usually operating beyond the borders of the empire.

There are examples of Arabs serving in the Roman army from as early as the second century when Nabateans were incorporated into the Roman Army as *cohortes I-VI Petraeorum* with a compliment of 4,000-5,000 men (Kennedy 1999, 76-106). In the late fourth century Arabs served in the Byzantine army as locally recruited camel riders listed in the *Notitia Dignitatum Orientis* as *equites sagittarii indiginae* (Isaac 1995 145-149). Although such units were fully part of the Byzantine army their terms of service appear to have been different from other soldiers. Thus it appears that they lived in houses with their families rather than in barracks and they served in their local areas (Isaac 1995, 145-6). It is known that these units continued to function to the end of the sixth century (at least 590 AD) though their fate after that date is unknown. The Persian wars and occupation certainly imposed a strain on resources and after the Byzantine re-conquest in 629 the size of the army was probably reduced. Kaegi has suggested that in Palestine on the eve of the Muslim conquest the Byzantine army consisted of 2-300 troops based at Caesarea and elsewhere "Small garrisons, composed of Byzantine but in effect long assimilated indigenous [Arab] troops, many of whom probably carried on some other occupation as well, existed probably of 100 or less to 200 soldiers, at sites on both sides of the Dead Sea and Jordan river" (1992, 41). It is also likely that there were garrisons in other towns with detachments of 100-500 troops.

It is generally accepted that the reduced size of the Byzantine army in Syria and Palestine during the seventh century meant that more reliance was being placed on the friendly Arab tribes or *foederati*. John Haldon has summarised the situation as follows "By the third decade of the seventh century they [Arab federate or allied troops] were... by far the most important element in the forces at the disposal of the *duces* of Palestine, Arabia, Phoenice and Syria" (1995b, 416). Of these the Ghassanids (or more correctly the Jafnids cf. Whittow 1999, 213-3) with their last king Jabala b. al-Ayham were leaders of a confederation of Arab tribes supporting the Byzantines (see also Kaegi 1992, 53). Other Arab tribes friendly to the Byzantines were the B.Irasha and al-Quda'a sections of the Bali tribe, Judham,Lakhm, B. al-Qayn and B. Kalb (Kaegi 1992, 68 n.4). The Arab tribes were based at a number of camps throughout Syria and Palestine the most important of which were Gaza, Jabiya in the Golan, Emesa, Damascus, Qinnasrin and Aleppo.

The significance of the Arab presence in the Byzantine forces is considerable. The most obvious was that the Arab defenders of Byzantium had much in common with the invading Muslim Arabs. This fact was not lost on the Muslims who had a policy of inducing Arabs loyal to the Byzantines to change sides although in some cases it also worked the other way (Kaegi 1992, 272). However more important in the long term is the cultural continuity from the Arab presence in the Byzantine armies to the early Muslim conquerors. This continuity may be expressed in a number of ways for example in the continued use of camps such as the Ghassanid *hira* at Jabiya or perhaps the Arab Byzantine camp at Gaza (cf. Northedge 1994 and Haldon 1995b 414-9). The importance of these camps for the subsequent development of Islamic urbanism in Palestine is considerable and will be discussed in greater detail below (Chapter 4). Whittow has also suggested that the Ghassanids/Jafnids acted as a political model for the Umayyads to consolidate their power in Syria (1999, 224). Certainly the presence of Arabs in Syria/Palestine in Byzantine times meant that after the Muslim conquests the Arabs were dispersed throughout the countryside unlike Egypt and Iraq where they were "huddled together in garrison cities to maintain their tribal isolation along the edge of settled land" (Crone 1980,29).

2. Non-Military Arab Settlement

First it should be stated here that the distinction between military and civilian settlement is problematic especially when military camps include accommodation for tribal families (see for example the description of the camp at Nessana in Isaac 1995, 146). However service in the Byzantine army, or as a client of the Byzantine state, does not explain the presence of all the Arabs settled in the region. Some of the Arabs were pastoral nomads using the area as part of their seasonal migrations, some were involved in long distance trade and some were sedentary engaged in various forms of settled agriculture. The dividing lines between these different forms of existence were not always clear cut, thus sedentary Arabs might spend a certain part of the year in tents whilst Arabs involved in long distance trade might also take part in military activity or live as pastoral nomads for much of the time. There is, however, one fairly clear distinction between Arab groups, that is between Arabs who keep sheep and goats and those who herded camels. Those with camels are able to travel more freely as they are no so dependant on water and can exploit more arid terrain.

In the sixth and early seventh century there is evidence of significant Arab migration to the area of Syria accompanied by a process of sedentarization (Haldon 1995, 416). There are two areas in particular where there is evidence of considerable Arab occupation in this period these are; the Hauran region (occupying the north of modern Jordan and the southern part of modern Syria) and the Negev in modern Israel. Both of these areas have been the subject of intensive archaeological surveys and excavations that have indicated considerable settlement in the sixth and seventh centuries indeed the maximum before modern times.

The Hauran is an area that has a long history of Arab urbanization beginning with the development of the site of Bostra by the Nabateans in the first century AD (Bowerstock 1983). During the Roman period Bostra developed into the economic capital of the province of Arabia. In the Byzantine period a number of new settlements developed or older settlements were enlarged by Arab immigration.

The most well known of these settlements is Umm al-Jimal located 10 kilometres west of Mafraq in north Jordan. As the buildings are made of basalt there is a remarkable degree of preservation which has enabled them to be studied in great detail (De Vries ed. 1998; Butler 1919). Some idea of the nature of the site in the late Byzantine period can be gathered from the fact that it had fifteen churches and between 4-500 inscriptions in five languages (Kennedy 1999 101; De Vries 1998). The centre of the Byzantine town was a Roman fort established in c. 300 AD. The majority of the buildings have the lay-out of Arab courtyard houses familiar from later periods indicating the Arab nature of the settlement (cf Pentz 1992, Fig 5). Other similar settlements include Umm al-Quttein, Umm al-Surab, Rihab and Khirbet al Samra. Each of these expanded in the Byzantine period and had numerous churches especially when compared with the relatively small size (Kennedy 1999, 101).

In addition to these small towns with their identifiable Arab character Kennedy has argued that many of the larger Hellenistic cities also had a considerable Arab/native culture. The Arab character of these cities was ensured by the fact that "even the improved cities of the Roman period will have remained death traps, continually replenished by a drift of excess population from the rural areas in general but the more marginal areas in particular". In particular Kennedy notes that the cities of the Decapolis "are likely to have been replenished more by the steppe and deserts to the east than from arable lands to south and west"(Kennedy 1999, 92).

Urban Decline?

One of the most contentious issues in the history of Palestine in particular, and Syria in general is the condition of the region on the eve of the Arab conquest. The traditional view, based mostly on a combination of the writings of Christian priests and European prejudices, sees the Arab conquest as a catastrophic end to the prosperity of the Byzantine era. As recently as 1992 Moshe Gill wrote about the Arab conquest in the following terms:

"... one can assume that the local population suffered immensely in the course of the war and it is very likely that many villages were destroyed and uprooted in the frontier regions and that the lot of these local populations was very bitter indeed. It appears that the period of the Arab conquest was also that of the destruction of the synagogues and churches of the Byzantine era, remnants of which have been unearthed in our own time and are still being discovered". (1992, 75)

Although the facts of this statement, relating to archaeological remains, have been shown to be unfounded (in particular see Schick 1995) the idea of a destructive invasion continues to occupy the minds of non-specialists (see for example Jeremy Johns 2001, 16). This view sees the Arab conquest as the final victory of the nomads in a millennia old conflict between the settled people of the Fertile Crescent and the nomads of the desert (cf Ibn Khaldun's model of nomads and city dwellers in North Africa). The settled people of the Mediterranean littoral are characterized as civilized people who were either Europeans themselves or had adopted European (i.e. Hellenistic/Roman) customs. The nomads on the other hand are regarded as uncivilized barbarians intent on looting the towns and villages of the settled people. Whilst there are some elements of truth in this view, the overall picture is now generally rejected in favour of a more complex analysis that emphasises the reciprocity between the groups (cf Pentz 1992, 12). In particular modern interpretations no longer see two opposed groups but a range of groups from foreign city based elites to camel herding nomads. Lancaster (pers comm. 1992) has made the observation that belonging to a nomad group is not predetermined by ethnic origin but is a choice taken at a personal or family level.

Methodological Problems

One of the problems assessing whether the area was subject to decline in the years before the Muslim conquest is deciding how this can be demonstrated archaeologically.

Measuring decline or otherwise through archaeology may appear to be straight-forward, particularly where abandonment of sites or regions is involved. However abandonment can be a complex process depending on the type of sites being studied (for a full discussion of this issue see Cameron and Tomka eds.1993). For example a site may cease functioning as a permanent settlement yet still be important as a temporary camp for seasonal activities. Other dangers inherent in assessing decline include judgement on such issues as the division of a house into a greater number of rooms or the encroachment of private dwellings or shops on public

space. Our pre-conceptions may lead us to see the division of rooms in a large house as a sign of decline though evidence form our own times should warn us that this could also be a sign of increasing prosperity signified by increasing demand on space. Similarly the encroachment on public space may be seen as an indication of decline though it may also indicate more flourishing trade. In some cases the evidence may appear to be ambiguous.

A related problem is deciding whether decline should be measured in economic or demographic terms or some combination of the two. Although it is generally assumed that there is a connection between economic conditions and the population in a given area the relationship need not be a simple one. For example Clive Foss (1997, 204) suggested that the population in parts of northern Syria remained high despite a decline in wealth thus he writes " The villages....were not abandoned at all after the sixth century, nor did their population decline drastically for a long time. Rather it appears that they continued to be occupied but became increasingly poor and more squalid".

Set against this view of decline there is archaeological evidence that indicates increased settlement before, during and after the Muslim conquests particularly in relation to the Negev Highlands. A similar situation applies to settlements in the Hauran which appear to have been flourishing at this time. Although these areas may have been exceptions to a wider situation they demonstrate that the situation varied widely over different areas and different levels of settlement. For example in Syria there appears to have been a decline in urban life whilst the village hinterlands remained relatively prosperous.

If one favours the view that there was a significant decline before the Muslim conquests there are differing views on the causes of this change. The views may be divided into schools, those seeing the decline as a result of natural disasters and those who attribute the decline to human agency in particular the war with the Sasanians.

Natural Disasters

If the Muslim conquests are not regarded as the direct cause of a decline or change then the period of transition must be dated either later or earlier. One school of thought identifies a period of decline in the sixth; century thus Kennedy (1985a) states ' the transition from antique to medieval Syria occurred in the years after 540 not after 640'. According to Kennedy (1985b) the symptoms of this change are the transformation from open colonnaded streets to narrow winding alleys, a change in the size of bath-houses and the disappearance of theatres. Although he sees this change as a gradual transformation with many causes he sees the plague of 540 as a decisive factor which led to serious and sustained falls in population' (Kennedy 1985b 18: see also Conrad 1986). However this view has recently been challenged by amongst others Pentz (1992) and Foss (1997). Pentz compares the situation in sixth century Syria with the region of Jilan (Iran) where a plague in 1876-77 reduced the population by a quarter. Although the plague was certainly destructive in human terms Pentz draws attention to the fact 'the plague had almost no effect on the economy of Gilan' (Pentz 1992, 66, citing Seyf 1989). Foss on the other hand doubts that the demographic effects of the plague were decisive as an agent of long term change citing as evidence the fact that there is no evidence of widespread population decline. Further Foss (1997, 260) states the archaeology '... shows that much of this country was still prospering in the late sixth century'. Although there are counter arguments to both Pentz and Foss[2] their general premise, that there is not enough evidence to suggest that the plague caused a decline in the cities, appears to be plausible. The same arguments apply when considering other natural phenomena such as earthquakes, famines and climate change. Without precise and conclusive evidence these occurrences cannot be given as causes for the decline of the Late antique town.

Persian Wars

If natural events are excluded as causes for decline one is inevitably left with human or social causes. The most notable event in the area before the Muslim conquest is of course the Persian invasion and occupation from 614-28. The effects of this event were two-fold, first there were the direct consequences of the invasion which may have had some impact on the economy and population of the area. Secondly there were the indirect consequences associated with the prolonged conflict with the Sassanian empire which led up to the eventual occupation empire.

Most writers agree that the direct effects of the Sasanian occupation were limited compared with the longer term consequences of the Persian wars. Nevertheless the Persian occupation was a reality, which must have had some influence on the areas subjected. Certainly there is historical evidence that Anatolia suffered dire consequences form the Persian invasion which is corroborated by archaeological evidence (Foss 1975). Christian historians of Egypt give a similarly negative impression of the Persian occupation although the archaeological evidence to support this has not been assessed (Severus ibn al-Muqaffa ed. Evetts 1907, 485). The evidence for Syria and Palestine is mixed with some historical accounts recording huge numbers of casualties and destruction whilst the archaeological evidence contains very little that can be directly linked with this period (for Syria see Foss 1997, 224 and 252. Referring to Apamea he states 'unfortunately the excavations have identified no specific evidence for the Persian period; only one coin from the Console House, certainly

[2] Pentz's suggestion that the plague may have had no economic effect can be compared with the economic consequences of the Black Death in medieval Europe. Foss's arguments for the plague having a reduced effect is based on evidence which has, by his own admission, very serious gaps.

represents this time' p.224). The best recent evaluation of Palestine during this period is that given by Robert Schick (1995, 20-48) who assesses both the historical and the archaeological evidence. At least in the initial phases of the occupation (i.e. up until 617 when the Sasanians altered their policy in favour of the Christians and against the Jews) the Jews are known to have assisted the Persians and may have been responsible for the destruction of some churches in Galilee in the vicinity of Acre (Schick 1995, 28-9). There is also some evidence for increased Bedouin attacks at this time though these appear to have been more opportunistic than part of a specific policy. The Persians themselves appear to have inflicted little damage on the towns and cities with the exception of Jerusalem where historical accounts relate mass killings. There is some support for this in the archaeological record thus outside the walls the monastery of St George at Givat Ram was burned as was the church of Gethsemane (Schick 1995,34:340: 352-3) whilst inside the city the New Church of Theotokos and the church of Probatica were destroyed (Schick 1995:34: 332-3: 333-5). Apart from the damage to churches there is no widespread archaeological evidence for destruction of the city at this time (Magness 1992) though historical sources relate more to the killing of people than the destruction of property (Connybeare 1910, 514-5: Schick 1995, 38). In concluding his assessment of the period of the Persian occupation Schick warns against underestimating its effects despite the rather sparse archaeological evidence thus he states;

"Even while one must be careful not to exaggerate the impact of the Sasanian invasion and occupation, their effects were undoubtedly serious, both materially and psychologically. The Christian population suffered heavy blows, and the brief period of Byzantine restoration that followed was not long enough for their recovery to be complete."

Although the period of Persian occupation was relatively short (only fourteen years) and is unlikely to have had much effect on the material culture of Syria/Palestine the wars which had preceded it lasted (intermittently) for more than a hundred years. The fighting during the sixth century was generally confined to western Mesopotamia (although occasionally it spilled over into Syria) and did not have much direct physical impact on the area of Syria/Palestine. However the conflict affected the area in other ways (eg increased taxation, billeting of troops, administrative arrangements and interruption to trade) which is likely to have had economic consequences. In a recent article Benjamin Isaac (1995,126-9) argued that the Byzantines did not consider the financial cost of the war with Persia, this meant that the costs of the conflict probably escalated particularly with the payment of subsidies to neighbouring peoples. There is, however, some debate as to whether warfare is good for an economy stimulating the industry and trade of a state rather than draining its resources. The limited information we have for sixth and early seventh century Syria makes it difficult to assess whether the overall economic effects of the Persian wars would have been positive or negative though it is likely that it would have caused a certain amount of wealth re-distribution with the Arab clients of the Byzantines (and the Sasanian clients such as the Lakhmakids) receiving large subsidies. This in turn may have had its effects on urban development and certainly contributed to the development of towns such as Umm al-Jimal and Bostra (see above 3.2 Arabs prior to the Muslim Conquest) perhaps at the expense of more Hellenised cities. Another effect of the warfare was the increased tax burden which may have led to a deterioration of the public architecture in the cities because any spare money would have been used for the war effort, either for payment of troops or in the construction of fortifications. The heavy tax burden may also have increased emigration of the curiales to the countryside where financial burdens may have been less (Cameron 1993,168-9). In this context it is instructive to note that from the seventh century the Byzantine Empire began to shift the burden of taxation away from the cities (Haldon 1990, 132: Haldon 1995a, 18 n.32). This action was possibly a recognition of the growing tendency for the rich (curiales) to retire to country estates.

Summary

From this review of Byzantine Palestine a few observations can be made which have relevance to the transition to Arab Muslim rule. The first is that, in view of the role of the church in urban institutions. Any decline in the power of the church is likely to have had a significant effect on the condition of towns. The fact that in many cases (eg Baysan/Scythoplis) the transition to Muslim rule seems to have had little immediate effect on the physical condition of the towns indicates a concern on the part of the new rulers to maintain the urban infrastructure.

The second point is that 'Arabicization' in the Byzantine period appears to have preceded Islamicization after the Muslim conquests. This factor may help to explain why the transition appears to be a gradual process rather than the catastrophic end of civilization presented by some contemporary Christian writers (for examples see Crone and Cook 1977, 155-6).

The third point is that there is no simple correlation between urban decline and the Arab/ Muslim conquests. Although there may be occasional examples of destruction as a result of the conquests in the majority of cases examples of decline can be traced both before and after the conquests.

4. EARLY ISLAMIC PERIOD

History

The Muslim conquest of Palestine took place over a period of six years from the first invasion in 634 to the occupation of Caesarea in 640 AD (**Fig. 7, Plate 31**) (for a detailed account of the conquest see Kaegi 1992). There is no evidence of towns having being damaged during the conquest even though battles were fought in the near vicinity. Occasionally, as in the case of Aqaba (Ayla), the city surrendered before the arrival of the Muslim armies. Other cities surrendered and agreed terms when confronted by Arab Muslim forces. Apparently the treaty agreed between the Muslims and Tiberias was fairly typical and granted the inhabitants the safety of their lives, possessions, children, churches and houses, with the exception of what they evacuate and abandon, setting aside a special spot for the mosque (al-Baladhuri ed de Goeje, 116).

In return the inhabitants were expected to hand over a proportion of their crops and pay a dinar for each of their animals.

In some cases the treaty terms appear to have been even more favourable to the conquered people, thus al-Tabari records the terms of Lydda's surrender[1] according to which the inhabitants of the city were offered the protection of the caliph 'Umar who guaranteed their freedom of worship and the safety of their possessions (al-Tabari ed. Guidi, I , 2406-7 and trans. Friedman 1992, 191-2). In the particular case of Lydda it can be seen that it was in the caliphs interest to ensure as much continuity as possible as this was the main economic centre of Palestine. During this period the population of Lydda and other towns was pre-dominantly Christian and the number of Muslims appears to have been fairly small. In these circumstances the new rulers were dependant on their Christian (and Jewish) subjects for their economic power and their administrative skills.

The only city where there is evidence of prolonged conflict is Caesarea which was finally taken in 640 AD after a prolonged siege. The historical sources provide mixed accounts of the occupation for example the Christian writer John Nikiu wrote of the 'horrors committed in the city of Caesarea in Palestine' (Nikiu cited in Schick 1995, 278) whilst the Muslim historian al-Baladhuri simply refers to the capture of prisoners (ed. de Goeje, 142).

The treaties of surrender also provide evidence that some inhabitants were leaving their towns rather than submitting to the new rulers[2]. For example a clause in the Tiberias treaty states that abandoned or evacuated land and possessions were exempted form the general security of tenure. It is probable that the majority of the evacuees were those enrolled in the Byzantine army rather than ordinary civilians (Whitcomb 1994, 15-16)

In general the conquerors appear to have aimed for minimal disturbance of the cities probably in realization that their wealth was dependant on the continuity of economic life within the cities. Schick points out that the majority of horror stories which relate to the conquest are from Christian sources and are of doubtful validity (Schick 1995, 83-4).

In the years immediately following the conquest there is little historical (or archaeological) evidence for the condition of the towns and cities though it appears that they gradually adapted to the new conditions. It is not clear how many people converted to Islam during this time as the incentives, such as exemption from the poll tax, may have been outweighed other factors such as the requirement to pay an alms tax (Schick 1995, 169; Dennet 1950). In this connection it is worth noting that converting to Islam did not exempt people from paying land tax though they were exempted if they left the countryside for the city. In this case one would expect to see a growth of urban Muslim communities at the expense of rural Christian communities. Unfortunately the evidence to test this theory is almost entirely lacking both in archaeological and historical sources.

During the Umayyad period there is little historical evidence for the condition of the cities though there are a few events which are likely to have had a significant impact.

The first of these is the conflict between Ibn al-Zubayr and the Umayyads in the 680s which allowed the Byzantines to capture coastal cities including Ascalon and Caesarea. Later on during the 740s there were a series of rebellions against the caliph Yazid II and Marwan II which led to attacks on Tiberias, Heliopolis

[1] Text of Lydda treaty as recorded by Tabari (ed. Guidi 2406-7 trans. Friedman, 1992, 192):
'In the name of God, the Merciful, the Compassionate. This is what the servant of God, 'Umar, the Commander of the Faithful, awarded to the people of Lydda and to all the people of Palestine who are in the same category. He gave them an assurance of safety for themselves, for their property, their churches their crosses, their sick and their healthy, and all their rites. Their churches will not be inhabited [by the Muslims] and will not be destroyed. Neither their churches, nor the land where they stand, nor their rituals, nor their crosses, nor their property will be damaged. They will not be forcibly converted, and none of them will be harmed. The people of Lydda and those of the people of Palestine who are in the same category must pay the poll tax like the people of Palestine who are in the same category must pay the poll tax of the Syrian cities. The same conditions, in their entirety, apply to them if they leave [Lydda].'

[2] See for example the treaty of surrender of Jerusalem which states 'those of the people of Jerusalem who want to leave with the Byzantines, take their property, and abandon their churches and their crosses will be safe until they reach their place of safety' (Tabari ed. Guidi, I, 2406, trans Friedman 1992, 191-2).

(Ba'albak), Damascus and Jerusalem. The final destructive event of the Umayyad period is the earthquake of 749 which had a ruinous effect on Scythopolis, Pella and presumably other town in the north of Palestine. In contrast to these destructive events Umayyad rule initiated a series of prestigious urban building projects including the construction of the Dome of the Rock in Jerusalem and the foundation of the new city of Ramla[3].

The Abbasid revolution appears to have had little direct impact on Palestine as the major events took place further east. The only significant incident relating to the change in the dynasties is the killing of seventy members of the Umayyad family at Nahr Abi Futrus (probably Antipatris see Tabari ed. Guidi, III, 47 also Gil 1992, 101). However a longer lasting impact of the fall of the Umayyads is that Syria in general and Palestine in particular became much further removed from the centre of caliphal power. Under the Umayyads southern Syria had been an area favoured by the caliphs as testified by their luxurious palatial residences (examples within Palestine include Khirbat al-Minya, Khirbat al-Mafjar **Fig. 14** and **Plates 3** and **4**). During the Abbasid period political, and building activity seems to have been centred on Iraq, in particular the newly constructed capital of Baghdad followed in the ninth century by Samarra (see for example Wheatley 2001, 112-3). Against this general view of the stagnation of western Syria a few notes of caution should be expressed. The first point is that the historical sources may be misleading, thus the construction of the al-'Anaziyya cisterns by Harun al-Rashid in Ramla (**Plates 39-41**) is entirely omitted from any historical accounts which instead concentrate on political events. The second point is that the archaeological evidence may be contaminated by knowledge of the historical sources. For example until recently very few Abbasid sites were recognized in Jordan and Palestine as the end of Umayyad rule was considered to be a cut-off point for material culture just as it was for politics. However recent work has shown that, as one might reasonably expect, there was considerable continuity, for example red-on-cream ware appears to have been produced after 750 AD even though it was previously thought to be a distinctively Umayyad ware (Walmsley 2001)[4].

However from the early tenth century there are signs of increasing political instability in Palestine with control of the country contested between the Tulunids, Qaramatis, Ikhshids, Fatimids, Bedouin and Turcomans. Despite this political fragmentation the economy appears to have been reasonably healthy as indicated by letters from the Cairo Geniza (see Gil 1992, 279-482). By 1030 AD after sixty years of almost continuous warfare the Fatimids established undisputed control over the country. However the prosperity of the country was interrupted by a series of earthquakes in 1033, 1068 and 1070 which devastated Ramla the provincial capital.

Administrative Divisions

The administrative divisions of the early Islamic period generally followed the Byzantine pattern although with a few significant changes (**Fig.11**). The Byzantine Palastina II became the Jund al-Urdunn although part of the neighbouring province of Phonecia Maritima was added so that the province had access to the Mediterranean coast. Palestina I and Palestina III became part of a single province, the Jund Filastin. There has been some disagreement about the origin of the Arabic *ajnad* as they do not correspond exactly with the previous division into civil provinces. Irfan Shahid (1994) has argued that the division into *ajnad* (s.*jund*) reflects an earlier Byzantine division into themes which took place after the Persian invasion of the early seventh century (this view is followed by a number of scholars examining towns in the early Islamic period most notably Whitcomb (1994, 20-22). However John Haldon convincingly argues that the new divisions reflect 'the pre-existing pattern of military commands under the various duces' rather than themes for which he believes there is no evidence at this time (Haldon 1995b, 420). Whatever the origin of the early Islamic administrative divisions they appear to have remained the same until at least the end of the tenth century (they are first recorded by ibn Khurradadhbih in the mid–ninth century (Schick 1995, 148)). Each *jund* was in turn divided into districts each with a capital. It is not clear how long these divisions persisted though the political fragmentation of the late tenth century must have made them impractical before they were finally extinguished by the Crusader conquest.

Forms of Urban Settlement

The above historical summary indicates that the Muslim conquerors were not interested in radically altering the existing urban order. Nevertheless the pattern of urban settlement altered significantly during the first five centuries of Muslim rule. Whether these changes were primarily a result of the supremacy of Islam or would have taken place anyway will not be considered in this part of the discussion though it should be pointed out that Europe experienced equally great changes during this period. Regardless of the causes of the changes Islam certainly exercised some influence over the development of towns in this period. The changes affected both the internal layout of cities and the wider urban network. In the next section I will examine three forms of urban settlement under the Muslims: the first is continuity of occupation with no change of site; the second is the creation of an adjacent settlement and the third is a

[3] According to M.A. Shaban Walid I was particularly interested in improving conditions in towns and writes 'Walid therefore applied some of the treasury's immense wealth to the improvement of urban conditions. In fact all of this money was spent in towns' (Shaban 1971, I, 118).

[4] A similar situation applies in reverse in Iraq where Umayyad remains were not identified until recently see for example Finster and Schmidt 1976 esp. 57-151.

completely new settlement[5]. These forms are not exclusive and are used for convenience thus it is possible that some sites will be discussed under more than one heading.

Continuous Settlement (Intra-Mural Settlement)

The majority of towns in Palestine appear to have continued functioning after the Muslim conquests. Where a settlement has ceased to function the problem for an archaeologist is in assigning a date to its abandonment and ascertaining the causes of the failure. Until recently historians tended to regard all the classical cities as fully functioning before the Arab invasions and assigned all the urban failures to the period immediately after the conquest. Whilst such a simplistic view is no longer tenable it does help to explain how the idea of urban decline became synonymous with the advent of Islam.

In recent times there has been a greater willingness to see urban decline as a factor independent of the Muslim conquests. For example Hugh Kennedy's work on Syria has seen signs of urban decline in the early sixth century (Kennedy 1985). On the other hand archaeologists working in Jordan and Israel/Palestine now regard urban decline as an event which occurred primarily after the mid-eighth century (i.e. with the fall of the Umayyads). These two views are not incompatible and indicate that urban decline occurred in different places at different times probably as a result of a number of factors. Whether Islam was one of the factors which led to the decline of the classical city is a moot point, though if it was, it was certainly not the only factor.

Regardless of the general causes of urban decline Islam undoubtedly had a major and increasing impact on the appearance of cities of Palestine. However the archaeological evidence is hard to asses, partly because the material culture of early Islam had not developed many characteristic features at this early date and because the majority of the population is likely to have remained Christian for a considerable time. As an example of the first point it may be noted that the coinage of Syria remained essentially Byzantine in form until the reforms of the caliph 'Abd al-Malik thirty years after the initial conquest. Support for the second point may be found in Schick's work which demonstrates the continued importance of the Christian communities of Palestine in the Umayyad and early Abbasid periods (Schick 1995). Note should also be made of the fact that a significant proportion of the population, particularly in Galilee, remained Jewish as is demonstrated by Dothan's excavations of a synagogue of the early Islamic period at Hammath Tiberias (Dothan and Johnson 2000).

Despite the difficulties mentioned above there is some archaeological evidence for the impact of the Muslim rule on cities. Examples from Syria include Palmyra, Hims, Damascus and Rusafa. At Palmyra there is considerable evidence of Umayyad activity such as the recently discovered Umayyad *suq* (As'ad and Stepniowski 1989). Archaeologists have also shown that the temple of Bel was used as a mosque following its use as a church. Bacharach (1996, 31) suggests that this was a congregational mosque with a *Dar al-Imara* to the south suggesting that a new specifically Muslim layout was imposed on the centre of the city. A similar situation may have existed at Hims where the central part of the city may have been rebuilt on a different (*qibla*?) alignment from the rest of the classical city (Whitcomb 1994, 16-17). Damascus provides another example where the small mosque of the early Islamic period was replaced by a much larger edifice, which together with the *dar al-'imara* (Palace of Mu 'awiyya) to the south became the new urban centre. At Rusafa the situation is slightly different with the majority of Umayyad buildings constructed outside the Byzantine walled city (Otto-Dorn 1957). However in the centre of the city a congregational mosque was established by Hisham to the north of the church of St.Sergius (Sack 1991). Bacharach (1996, 30) postulates that because of its position to the south of the Friday mosque the church was later converted into the *Dar al-imara*.

The above examples from Syria indicate how the centres of pre-Islamic towns could be transformed into a specifically Muslim form. Unfortunately the evidence from Palestine is, with a few exceptions, more difficult to interpret. There are a number of reasons for this situation which may be placed into three main groups. In the first place the number of early mosques discovered in urban contexts is limited and the size of these mosques is generally small (see for example Schick 1995, 140-1 Table Six which includes only three towns, Jerusalem, Bet Shean, Shivta and Ramla with archaeological evidence for mosques). Secondly archaeologists working in the area have generally not been interested in finding evidence of the early Islamic period (see for example the discussion of Sepphoris in the Catalogue). Thirdly there are a number of towns such as Nablus, Gaza and Hebron where archaeological excavations have been extremely limited due to the military occupations of the twentieth century.

In this situation it will be useful to start with the best documented examples and afterwards consider those for which there is less evidence. The best known example is, of course, Jerusalem where the combination of the Dome of the Rock, the Aqsa mosque and the Umayyad palace mark a significant Muslim presence in the city (**Fig.13**) (see for example Rosen-Aylalon 1989).

At Baysan (Hb. Bet Shean) there was a small mosque which formed part of a walled housing complex on the hill (Tel al-Husn) overlooking the city centre (**Fig. 40**). The size of the mosque is small and it was evidently not a Congregational mosque for the city but rather it was

[5] These divisions are similar to those adopted by Whitcomb (1994) in his study of Syrian cities though slightly adapted. Thus the choice of which city fits into which category is also slightly different in my catgorization.

intended for a small community of Muslims (troops?) resident on the tell. The mosque and associated streets are built over a church of the Byzantine period. The date when the church was abandoned is not clear (certainly pre-ninth century) though it was probably before the Muslim conquest. There was also another small mosque in the city centre below Tell al-Husn which has been dated to the Abbasid period (i.e post 749 earthquake). Neither of these two mosques can be classified as congregational mosques indicating either that the Muslim population of the city was extremely small or that there was another mosque which has yet to be located. One possibility is that the mosque known as Jami'al-Arbain which was still in use in the late Ottoman period was built as a congregational mosque in the early ninth century (**Fig. 40 No.16** and **Plate 16**). If this is the case it provides some support for the idea that the main area of settlement shifted from the valley to the plateau above. Whilst the dating of the three mosques is in need of greater precision it can be seen that the arrangement of congregational mosque and *Dar al-'imara* which is seen at other sites in Syria and at Jerusalem does not appear to have been followed here. There may be a number of reasons for this though the fact that the city was replaced by Tiberias as regional capital may be significant.

However the identification of a Muslim presence in a city need not be confined to the presence of a mosque. The most striking example of the Muslim presence in Baysan is the recently excavated monumental gateway to the *suq* which was decorated with a glass mosaic inscription of the *shahada* dated to the reign of the Umayyad caliph Hisham (**Fig. 41**)(Khamis 2001).

At the other end of the urban scale from the large city of Baysan is the small town of 'Isbaita located in the northern Negev. Here the impact of Islam on the urban design appears to have been limited to the construction of a small mosque adjoining the baptistery of one of the three churches (**Fig. 34 and Plates 11-14**).

In most of the other urban centres where continuity of occupation can be observed there is no archaeological evidence of a mosque although there may be literary evidence. In these cases there are often other signs of urban development which may be detected archaeologically. For example in Caesarea a new quarter based on a grid plan was established in the eighth century which continued in use, with some modifications, for 350 years. Similarly a new street pattern appears to have been built in Arsuf in the Umayyad period. Both of these towns also had walls which were established in the early Islamic period (in both cases the walls enclosed an area smaller than that of the Byzantine period though significantly Islamic occupation was not confined within the walls).

However not all of the Byzantine period cities continued to flourish during the whole of the early Islamic period. For example there is very little evidence that either Sepphoris or Dor flourished beyond the first years of the Umayyad period (it should be pointed out that significant evidence for the Byzantine period at both sites has only recently been discovered and it is therefore not unlikely that more substantial evidence of Islamic period occupation may be discovered in the future). Similarly most of the Negev settlements appear to have dwindled by the end of the Umayyad period (though this may be subject to revision).

Adjacent Settlement (Extra Mural Settlement)

Although the majority of towns and cities continued to exist on the same site after the Islamic conquest with few alterations to the urban plan there are other cases where a new settlement was built adjacent to the earlier pre-Islamic settlement. One of the clearest examples of adjacent settlement in the medieval Muslim world is the city of Merv in Khurassan (present day Turkmenistan). The pre-Islamic city (Gyaur Kala) continued to function during the early years of Muslim rule and in the tenth century another city of equal size (Sultan Kala) was built next to it which then became the main city. In turn this site was also superseded when a third city was built alongside in the fourteenth century (**Fig. 23** and **Plate 7**) (see Herrmann and Petersen 1997). A better known example is the city of al-Rafiqa (Raqqa) which was built by the Abbasids as a suburb of the Roman-Byzantine city of Nicephorium and later became the main city (Creswell 1989,243-8 and 271-5). This phenomenon is not of course unique to the Islamic world one of the best known examples in Britain is the foundation of Salisbury near to the site of Sarum in the twelfth century.

Adjacent settlement can take a number of forms, depending on the reasons for locating outside the limits of an existing city. One of the most obvious forms is the suburb (*rabad*), which may be a walled or un-walled extension of the city to accommodate population growth. A more specific form of growth is where the administrative functions are moved outside the old city to signify the arrival of a new type of rule. It is this pattern of settlement which Whitcomb (1994) identifies as typical of the early Islamic period at sites such as Tiberias and Aqaba. An appropriate analogy may be the addition of European quarters to pre-existing towns in colonial India (eg New Delhi).

The evidence for a new Islamic period settlement outside the classical/Byzantine city is best documented at Aqaba/Ayla (**Figs. 30** and **31**). The new settlement has a plan typical of many of the Umayyad *qusur* (palaces) though its four gates characterise it as a *madina* (city). Despite its self-contained appearance this new settlement was evidently intended to complement the existing city rather than replace it. A similar situation may have existed at Tiberias where Harrison has suggested that a *misr* (camp) was built at the northern end of the Byzantine city (**Fig. 42**). If Harrison is correct the new settlement at Tiberias may have been built to serve the additional administrative needs acquired when the city became capital of the *jund* (Harrison 1992).

There are two other examples of adjacent settlement in early Islamic Palestine both of which seem to be a response to a particular need rather than part of an imperial policy. The first of these, Capernaum, has recently been identified by Whitcomb (1994, 24-5) who shows that after a period of abandonment in the seventh century a new Umayyad settlement was built next to the Roman Byzantine site. The difference between Capernaum and either Aqaba or Tiberias is that the earlier settlement at Capernaum appears to have ceased to exist before the new town was built (there is also the question of whether Capernaum should be considered an urban site in this period). The second case of adjacent settlement adopted for a specific local need is Haifa. According to twelfth century sources there were two towns, old Haifa and new Haifa. The New Town appears to have been a fortified settlement established by the Fatimids in the eleventh century (for a discussion of the evidence for New Haifa see Pringle 1998, II, 150-2).

New Towns

New towns in Syria in general and Palestine in particular are rare in the early Islamic period. In fact the only new town founded by the Arabs in Palestine before the eleventh century was Ramla. In contrast to this situation a number of new towns were founded by the Arabs in Iraq, and North Africa.

According to Donner (1981, 148) the reason for the scarcity of new foundations in Syria was that 'the Muslims in Syria seem to have preferred to reside in established towns'. A more detailed explanation provided by Northedge suggests that the reasons for preferring the established towns was that many of these already possessed accommodation which had previously housed Byzantine troops (1994). Another reason is that the Muslim Arabs may have had cultural contacts with towns before the conquest and so regarded them as desirable places to live.

The new towns founded by the Arabs may be divided into three main categories: *amsar* or camp towns, palatial towns and new civilian settlements. These categories are not exclusive and, as will be shown, often overlapped with each other. However the significance of this categorization is to demonstrate that that the agency for urbanization in the early Islamic period was not from a single source. The issue is complicated by the fact that different dynasties (eg Umayyad, Abbasid and Fatimid) adopted different approaches to the foundation of new towns though in general the divisions suggested above remain valid.

Amsar

Amsar is a collective term (sing *misr*) for military camps or garrison cities. Because the majority of early Islamic settlements began their life as *misr* the term has become synonymous with urban settlement in the early Muslim period (see for example Northedge 1994, 231 and Whitcomb 1994, 13), however as will be shown below this was not necessarily the case.

The first *amsar* were the twin towns of Basra and Kufa founded in Iraq during the first part of the seventh century (see Fig. 16). These were both built next to pre-existing towns and therefore also qualify as adjacent settlements[6]. However it should also be pointed out that both towns stood at a distance of several miles from the earlier settlements and were clearly new towns rather than relocation of old settlements. The urban plan of both these *amsar* has been discussed in detail by a number of scholars because of their implications for later Islamic urban development. However for the present only a few features need be noted. Firstly the towns were intended primarily as settlements for Arab tribes taking part in the expansion of the Muslim world and were divided into tribal quarters. Secondly neither of the towns was enclosed within a wall but they were simply surrounded by ditches to mark the edges of their respective settlements. Thirdly most of the buildings would have been of a temporary nature (e.g. tents or huts). Fourthly it appears that both towns had been demilitarised by the mid-Umayyad period (cf Northedge 1994, 232). A further Iraqi *misr* was founded at Wasit in the early eighth century by al-Hajjaj the Umayyad governor in Iraq. This was partly a measure to control the urban populations of Basra and Kufa and perhaps also a way of housing the Syrian army which could not be maintained in Syria (c.f. Kennedy 1995, 374). Other early *amsar* include Fustat in Egypt, Barqa and Qayarawan in North Africa (later examples include Ajdabiyya).

The only possible case of a *misr* in or near Palestine is the military camp of Jabiyya in the Jaulan. Although this settlement had pre-Islamic origins as a Ghassanid centre its role as a regional tribal centre during the first years of Muslim occupation make it analogous with other *amsar*. Unfortunately there has been no archaeological investigation of the site, which unlike the other examples cited above does not appear to have developed into a truly urban settlement (J.Sourdel Thoumine *EI2*). Another possible *misr* is the camp at Emmaus-Nicopolis which briefly functioned as a regional capital in 638 AD until it was devastated by plague. Unfortunately the archaeological information so far available from the site is not useful in determining the nature of the early Muslim settlement (Vincent and Abel 1932).

Towns centred on Palaces

The relationship between palatial complexes and urban settlement has been recognised by both Northedge (1994, 241) and Whitcomb (1994, 19). The best known example is Qasr al-Hayr al-Sharqi which is a remote site in the Syrian steppe/desert comprising a greater and lesser

[6] Basra was founded near the settlement of al-Khurayba and Kufa was founded near the pre-existing town of al-Hira. For the foundation of Basra see Tabari (ed. Guidi 2377-89 and trans. Friedman 1992, 161-172). For the foundation of Kufa see Tabari (ed.Guidi I: 2487-88) and Djait 1986.

enclosure and a number of ancillary buildings. The importance of this site is that an inscription found in 1807 specifically refers to it as a *madina* built by the people of Hims in 110 AH/728-9 AD (Clermont-Ganneau 1888-1924, 3 285-93; Grabar et al 1978). The size of the site and its remote location clearly indicate that it was intended as a new urban foundation though the fact that it was abandoned by the end of the Abbasid period means that its role in the development of Islamic urbanisation is generally underplayed.

Of course the most spectacular example of palace centred urban foundation is the massive city of Samarra founded by the Abbasid caliph al-Mu'tasim in the early ninth century. The city is essentially a number of large palaces with areas in between accommodating housing for the troops and their families (see Northedge 1985 and 1993). Other examples of urban development with a palace at the core may include the palace at Ukhaidhir in Iraq (Bell 1914) and Madinat al-Far in Syria. Unfortunately archaeological examination of the area around Ukhadhir has been limited though it is evident that there was substantial extramural development which was contemporary with the palace[7]. The case of Madinat al-Far is better documented both through archaeology and historical texts. The site, which is located on the Balikh river in Syria, comprises a walled settlement and a palace and has been identified by its excavator as Hisn Maslama the residence of the Umayyad general Maslama ibn Abd al-Malik (Haase 1996). Another possible Syrian example is Jabal Says located in the Hauran north-east of Bosra. The site comprises a central palace, a bathhouse, a mosque and several large houses surrounded by other buildings of unknown function (Sauvaget 1939; Brisch 1963 and 1965). Although these are the essential elements for an urban settlement Northedge (1994, 241) suspects that they might not be contemporary thus the inhabited area at any one time may have been smaller than is indicated by the plan of the remains. However it is equally possible that there were further structures of less durable material whose remains were not detected in the surveys.

Further west in modern Lebanon the city of 'Anjar is another example of a city dominated by palatial architecture (**Fig. 15** and **Plate 2**). Unfortunately neither the date nor the patron of this city is known with any certainty although Bacharach (1996, 34-5) has recently suggested that it was built by Abbas son of the caliph al-Walid I (reigned 705-15) probably in 714 AD. The relationship of 'Anjar with Ramla will be discussed in more detail below.

Within the province of Urdunn 'Amman presents the best example of a palace centred development. Though, of course, the city had existed before the Muslim conquest the re-development under the Umayyads was based around the palatial complex on the citadel. In addition to the palace with its famous audience hall there was a network of streets with houses and other buildings. This urban development was separate from the city below which had its own Friday Mosque (Northedge 1992).

The most likely candidate for a palace centred urban development in Palestine is the site of Khirbat al-Mafjar near Jericho in the Jordan valley (**Fig 14, Plates 3 and 4**). The size of the palace complex has recently been shown to be larger than previously thought with a large service complex discovered to the North of the palace and bathhouse excavated by Hamilton (1959)[8]. It is possible that further parts of the complex remain unexcavated inviting comparison with other early Islamic urban sites (e.g. Anjar). Unfortunately little is known of the surrounding archaeological context in particular the neighbouring town of Jericho at this period which would help us understand the role of Khirbat al-Mafjar.

The other well known Umayyad palace in Palestine is Khirbat al-Minya. The palace itself is fairly small (67 x 73m) and no other complexes have yet been located in the immediate vicinity. However its location at the north west of the Sea of Galilee near a major crossing point of the river Jordan it an ideal location for an urban development and it is notable that the site became a market centre in medieval and Ottoman times (Cohen and Lewis 1978, 57, 58, 67 165, 167).

Another candidate for a palace centred urban development in Palestine is Ramla because according to al-Baladhuri the first construction on the site was Sulayman's palace followed by the House of the Dyers (*Dar al-Sabbaghin*). However the historical context makes it clear that the palace was merely part of a larger urban development not its principal cause and therefore Ramla should be considered as part of the third category to be discussed below.

New Civilian Settlements

In both the two categories discussed above urban development appears to have been a secondary consideration in this third category the creation of an urban entity appears to have been the primary consideration. Probably the best example of this type of settlement is Baghdad which was founded by the Abbasid caliph al-Mansur between 761 and 767 AD (for description and general discussion see Creswell 1989). Although the city had both cantonments for the army and palaces for the caliph and his family its primary purpose was to provide a capital for the new Abbasid caliphate (cf Creswell 1989, 242 n.3). Another aspect to the

[7] The date of Ukhaydhir is still not resolved though recent research has shown that at least part of the development began in the Umayyad period (cf Finster and Schmidt 1976 esp p. 57-80).

[8] The renewed excavations at Khirbat al-Mafjar are part of the Qasr Hisham project which is a partnership between UNESCO, the Palestine Department of Antiquities and the Studium Biblicum Fransiscanum. The results have not yet been formally published though a plan of the complex is reproduced in a leaflet issued by the Palestinian National Authority Ministry of Tourism and Antiquities n.d. *Qasr Hisham, Jericho*.

foundation of the city has been observed by Kennedy who compares it to a modern property speculation whereby the developer (the caliph) buys the land very cheaply giving some in allotments to the administration and later selling the remaining land to prospective inhabitants at much higher prices (Kennedy 1981, 86).

Ramla (**Figs. 53-62** and **Plates 34-44**) appears to have been a similar type of settlement founded as a capital (though of a more restricted area) with the Governor (later Caliph) as the chief developer. Some memory of this is preserved in Baladhuri's account of the foundation of Ramla where he states;

'when Sulayman had built for himself, he gave permission to the people for construction, and they built; and he dug for the people of al-Ramla their canal which is called Barada, and he dug wells' (al-Baladhuri ed de Goeje, 143).

The army is not mentioned in the foundation accounts of Ramla and it appears to have been primarily a civilian settlement. The location of Ramla close to Lydda/ Ludd the economic, and for a short time the actual capital of Palestine is significant and may be paralleled by Baghdad's proximity to the former Sassanian capital at Ctesiphon. In other words both cities were built next to existing urban centres yet were clearly distinct from them.

It is possible that 'Anjar was a settlement of this kind though on a much reduced scale where the founder (Abbas ibn Walid?) established the essential infrastructure, (eg colonnaded streets, bathhouses, walls etc) and attempted to sell the remaining plots to civilian settlers (**Fig. 15**). There is also a question of the location of 'Anjar at the southern end of the Biqa valley. Superficially the site has a lot to recommend it situated midway between Damascus and the coast and it may have been intended as a rival to Baalbak (Heliopolis) further north. However as a property development 'Anjar manifestly failed as much of the interior of the city was never built upon. Bacharach has suggested that this was because the patron of the city (Abbas) was not sufficiently important to attract settlers. If we accept Bacharach's proposition that 'Anjar was constructed by Abbas ibn Walid the fact that he never succeeded to the caliphate may have been an important factor in the city's decline though a more powerful reason may have been that its location was wrong[9].

Capitals and Chief Towns

The division of Palestine into two administrative districts under the Muslims meant that in theory, at least, there were two capitals, one of Filastin and one of Urdunn (**Figs. 10 and 11**). However in practice it appears that the capital of Filastin was pre-eminent, thus Ramla was more important than Tiberias in the early Islamic period and Gaza was more important than Safad under the Mamluks.

Under the Byzantines Palaestina I (equivalent to Filastin) was ruled from Caesarea though Lydda appears to have been the economic capital (Shwartz 1991). Initially the Muslims also used Caesarea as a capital but soon moved to Emmaus- Nicopolis, presumably because the coast was thought to be too vulnerable to Byzantine attack. The nature of the Muslim settlement at Emmaus is unknown despite some limited excavations at the site mainly concerned with the church (Vincent and Abel 1932). The memory of the presence of an early Muslim camp at Emmaus is commemorated by the shrine of the Muslim general which occupies the site of a former Roman bathhouse (Dow 1996, 33, Plate 28). The Muslim base at Emmaus was soon discontinued because of a plague and the capital was moved to Lydda (Tabari ed. Guidi I, 2516). Soon after the move Sulayman founded Ramla as a new city adjacent to the predominantly Christian city of Lydda (al-Baladhuri ed.de Goeje, 143). The name Ramla (sandy) presumably refers to the fact that the site was previously uninhabited and may also have had some connotations for Muslim Arabs away from their desert origins (cf foundation of Kufa below and detailed discussion of Ramla in Chapter 8).

The above account of the foundation of Ramla echoes similar stories relating to the foundation of other Islamic capitals cities such as Kufa, Wasit, Baghdad and Samarra. In all these cases existing centres were tried and found to be unsatisfactory leading to the foundation of a new city. Although the reasons for rejecting the older, alternative sites, were different in each case there appear to have been a few common factors. In the first place there was a need to be distinctive, to place the past at a distance and inaugurate a new era. Secondly the new capital cities were created to house Muslims and as such were places where Islam was central to the organisation of the settlement. Thirdly in each case there was an economic element, for example Kennedy's description of the foundation of Baghdad as a giant property speculation (1981, 86). Similarly he interprets the foundation of Wasit as a way of paying the Syrian army. Fourthly the location of a new capital city was designed to fit the particular dynastic and political circumstances. Thus Kufa was located on the right (west) bank of the Euphrates enabling the tribesmen to maintain their contacts with the Arabian peninsula. On the other hand Baghdad was located in the centre of Iraq at a place where the Tigris and Euphrates are at their closest giving it access to both sides of each river and areas beyond (**Fig. 8**).

The above factors all apply to Ramla. It must have been evident to the Umayyads that Lydda was the economic centre of the region, yet it was unsuitable as a Muslim capital because of its Christian associations and also because there was little room to establish a Muslim

[9] An alternative hypothesis suggested by Northedge (1994 234-5) is that the 'Anjar was built by Abbas for housing his troops. However this does not necessarily imply that 'Anjar was a military camp rather that it was intended as a civilian settlement for troops and their families. In any case as Northedge admits there is no certainty for his interpretation.

administration without displacing the very people on whom the prosperity of the town depended. Instead Sulayman followed the precedent set by the foundation of Kufa where the new town was built to replace the nearby town of al-Hira. A further economic consideration is that the land on which Ramla was built was cheap for Sulayman to purchase because it was sandy and with no natural water supplies yet it could be sold at an inflated price once he had begun to construct a regional capital on the site with water supplied by a new aqueduct. For these reasons Sulayman was keen to encourage the inhabitants of Lydda to move to his new city sometimes even resorting to coercion (al-Ya'qubi ed. de Goeje 328). This would have a double benefit as it would develop commerce and industry and make the land in the new city more valuable. This may be the reason why Ramla succeeded as a new foundation and 'Anjar did not as it was too far removed from its nearest urban centre (i.e. Baalbak c.f. Bacharach).

From its foundation it is clear that Ramla was intended to function as the provincial capital. For example the aqueduct leading to Ramla was called al-Barrada after the river that runs through Damascus indicating a conscious desire to echo the layout of the Umayyad capital. However there are a few unresolved questions about Ramla's status as a capital and in particular in particular its relationship to Jerusalem.

Although it is noticeable that Jerusalem is absent from the list of sites which functioned as capital during the early Islamic period it is clear that it had a special status (**Fig.13**). Its great significance to the Umayyads can be seen by the construction of the Dome of the Rock and associated buildings in the Haram. One could argue that this importance was purely religious were it not for the fact that a substantial palatial complex has been identified to the south of the al-'Aqsa mosque (Ben-Dov 1971; Creswell 1989, 95-6; Rosen-Ayalon 1989, 8-11). The location of these buildings directly behind the congregational mosque of Jerusalem follows a pattern established at other early Islamic cities such as Kufa and Wasit and indicates that the city was more than simply a religious centre.

The relationship between the two cities, barely fifty kilometres apart, becomes even more relevant when Sulayman becomes caliph in AD 715. According to al-Baladhuri (ed. de Goeje 143) Sulayman's work on the mosque at Ramla stopped when he became caliph implying that he had moved elsewhere, probably to Jerusalem, as this was the place where he received his insignia of office. The fact that he was prepared to leave his own city unfinished implies that he did not regard Ramla as suitable residence for a caliph though of sufficient status for a provincial governor (it also implies that the city was unfinished an idea that is supported by the archaeological evidence which shows no substantial occupation before 750 AD). The fact that Sulayman took his name from that of the Jewish King Solomon implies some form of identification with Jerusalem and he may have regarded it as the imperial capital superseding Damascus. The idea of Jerusalem as an alternative imperial capital has been put forward by a number of scholars (Peters 1985, 201; Baccharach 1996, 38 n.102) though there is no evidence that it ever achieved this status. The unfinished nature of the Umayyad works south of the Aqsa mosque suggests that visions of Jerusalem as imperial capital were short lived.

During the tenth and eleventh century the deterioration of the political situation meant that different parts of the country were under the control of different forces. However there was still some recognition that Ramla was the capital, thus Fatimid coins continued to be minted there at least until the middle of the eleventh century even though their hold of the city was tenuous (Blau and Stickel 1857, 452). It is possible that Ramla had a special importance for the Fatimids as the *mahdi* Ubaydallah was sheltered there by the Abbasid governor in 902 AD (Ivanow 1942, 172, 181, 191, 194). The symbolic importance of Ramla as a capital city can be seen by the fact that the Qaramatis established themselves there and minted their own coins in the years 360-2 AH (970-3 AD) (Mitchell and Levy 1965/6). With the Crusader conquest of the mint of Filastin was transferred to from Ramla to Ascalon indicating that it was now recognized as the Muslim capital of Palestine (Gil 1992,367 n. 33 & 487 n.101).

The status of Jerusalem in this period immediately before the Crusader conquest is less clear. Carole Hillenbrand argues that the Fatimids initiated a policy of enhancing the city's sanctity that may have begun with the destruction of the Church of the Holy Sepulchre by al-Hakim in1009. This was followed later in the century by the most extensive restoration work on the Haram since the Umayyad period. The work included the rebuilding of the Aqsa mosque and extensive mosaic inscriptions including the first referring to Muhammad's ascent to heaven (a theme which became current in later times). Hillenbrand also points out that during this period Muslims used Jerusalem as an alternative pilgrimage destination to Mecca (Hillenbrand 1999, 148; Nasir-i-Khusraw in Le Strange 1890, 88; see also Duri 1982, 355). Whilst it is clear that the Fatimids carried out this work in Jerusalem the reasons for this veneration have not been discussed. One possible reason is the military successes of the Qaramatis who in the 970s headed an alliance of anti-Fatimid forces. The Qaramatis were an Ismaili group theologically close to the Fatimids but bitterly opposed to them. One of their beliefs was a veneration for Jerusalem which they adopted as their *qibla* (Tabari ed. Guidi, III, 2128). The initial popularity of the Qaramatis and the closeness of their doctrines to the Fatimids may have have encouraged the Fatimids to develop Jerusalem as a centre of Muslim veneration though not as a political capital.

Whatever plans the Fatimids had for Jerusalem were reversed in 1099 when the Crusaders took control of the city. Under Frankish control Jerusalem was re-structure

as a Christian city (eg conversion of Dome of the Rock into a church and of the Aqsa Mosque into the headquarters of the Templars) and became capital of the Crusader Kingdom until its re-conquest by Saladin in 1187. Thus for a period of almost ninety years Jerusalem functioned both as a spiritual and political capital. It is possible that the Ayyubid prince al-Muazzam 'Isa planned to retain Jerusalem as a capital by his re-construction of the walls though the demolition of the walls a few years later clearly indicated an end to this policy (C.Hillenbrand 1999, 215: Sibt al-Jawzi VII/2, 601).

5. CRUSADER PERIOD

The principal event that separates the early Islamic period from later medieval times is the Crusader conquest of AD1099. Although there are undoubtedly elements of continuity between the two periods, the Crusader occupation marks a change in the political, cultural and economic make up of the region as fundamental as that introduced by the Muslim conquest nearly five hundred years earlier. The Crusader territories were divided into three contiguous states: the Kingdom of Jerusalem comprising most of Palestine and parts of southern Lebanon, the County of Tripoli and the Principality of Antioch. Crusader control was essentially restricted to the coastal areas and, with a few exceptions, rarely reached further east. Thus the castles of Karak and Crac des Chevaliers were the eastern outposts of Latin Christendom.

During the period of Crusader rule the orientation of the area was abruptly shifted westwards and northwards away from the influence of the Fatimids to the south and from the Turks to the east. Allied to this change was the division of greater Syria (Bilad al-Sham) into a coastal region dominated by the Franks and the interior ruled by Turkic dynasties. In both cases the local people were subject to foreign rulers the only difference being their religion. Unfortunately there are no precise data on the relative proportion of Christians to Muslims in Palestine prior to the Crusades (for a discussion of the relative proportions of each population see Ellenblum 1998, 20-21). The only thing which can be said with any certainty is that the population contained significant proportions of both religions and that both sectors had become accustomed to Muslim rule and therefore Crusader rule was a major change.

The accounts of the Crusader conquest are considerably more detailed than those of the Muslim victories five centuries earlier. Unlike the Muslim conquest which was mostly fought between rival armies the Frankish occupation comprised a number of sieges and attacks on cities. Muslim historians give graphic descriptions of the destruction accompanying the Crusader occupation of cities thus, Ibn al-Athir states in reference to the taking of Acre, 'The Franks took it by assault, and unleashed the full violence of their brutality on the population'; or, describing the fall of Jerusalem, 'the population was put to sword by the Franks, who pillaged the area for a week' (Ibn al-Athir X, 193-5 and 225 trans in Gabrieli 1969,11 and 17). Whilst these accounts were no doubt coloured by Muslim sentiments it is clear that the Crusader conquest was brutal and destructive especially in the cities.

Set against this generally negative account of the Crusader conquest it can be seen that the cities were fairly rapidly repopulated and few towns were abandoned as a result of the conquest[1]. Naturally the city that attracted the most attention was Jerusalem which rapidly developed as a political and religious capital of the Frankish state. It is difficult to gauge the effect of the Crusader conquest on the layout of the city as many of the most important Christian sites pre-dated their arrival[2] and very little is known of the appearance of the city immediately before their conquest (though see Prawer 1985). There was however some re-orientation, the most important elements of which were the conversion of the Dome of the Rock (Qubbat al-Sahra) into a church (Templum Domini) and the conversion of the Aqsa Mosque into the headquarters of the Templars. The influence of the Crusaders on town planning is more visible in Acre which replaced Jerusalem as capital in 1191 (Pringle 1997, 15-17). With its increased importance the city walls were expanded to enclose a much larger area than either the earlier Fatimid walls or the Ottoman walls which currently enclose the old city (the precise size of the thirteenth century city is still a matter of discussion though it was clearly much larger). One of the features of the thirteenth century city was its division into quarters for different groups and nationalities. A similar division appears to have taken place in Jaffa where there were separate quarters for the Pisans and the Hospitallers. Like Acre, Jaffa appears to have comprised two walled areas, an inner area or citadel and an outer suburb or *faubourg*. It is not clear whether the suburb represented a new development or was a continuation from the Fatimid period though a document refers to it as *burgus novus* with its own parish church (RRH No. 1085).

In addition to the pre-existing towns it appears that the Crusaders founded some new urban settlements. New Frankish towns were of two types, small unfortified settlements and larger settlements which were subsidiary to a castle. In terms of size the unfortified settlements may be regarded as large villages though the fact that the inhabitants pursued a variety of occupations and had a sufficient number of burgesses to hold burgess courts means that they can be classed as small towns[3]. The fortified settlements such as 'Athlit, Safed and Dayr Darum may be regarded as primarily military in character though the fact that each contained a *faubourg* with and a burgess court indicates that they also had a substantial

[1] For a discussion of Crusader cities see Prawer 1977 and 1980.

[2] The churches had all been destroyed by the Fatimid caliph al-Hakim (for references and description of destruction see Gil 1992, 370-381).

[3] Pringle (1995, 71) uses the burgess court as a consistent way of identifying urban settlements though Boas (1999, 57 no.1) questions this stating that the urban qualifications of some of the settlements are very slim. The position adopted in this thesis is that the new Crusader settlements were embryonic towns which may not have had the size or population one would normally expect in a town but did have the potential to develop into towns. In this connection it is worthwhile recalling Swanson's comments on medieval towns of Britain where she observes that small towns often had populations of less than 500 (1999,14).

civilian component. In any case the continued success of Safed and Dayr Darum under the Mamluks and Ottomans indicates that the Crusaders had established a basic urban infrastructure in each of these settlements[4]. In addition to the new towns a number of villages such as Bethlehem and Nazareth were raised to urban status because of their religious importance to the Crusaders. It is perhaps significant that neither of these towns had any form of fortification perhaps as part of a deliberate policy to remove them from damage in any conflicts.

Although in general the Crusaders attempted to establish towns on a European model they were undoubtedly influenced by Muslim concepts of urbanism because the area had been under Muslim rule for five hundred years previously and because they had considerable contact with the native Muslim population. Whilst the crusaders altered key symbols of religious authority such as the Dome of the Rock they could not remove all traces of the Muslim presence. Although there are no examples of mosques being constructed under Crusader rule there are examples of structures being built which are normally associated with Islamic towns. For example the new town of 'Athlit was equipped with a bathhouse and most of the cities contained khans for merchants.

There are no examples of towns that ceased to exist as a result of the Crusader occupation though the decrease in the area of both Ramla and Tiberias, both former capitals, may have been the result of different priorities of the new rulers. However both towns had been subject to numerous attacks before the arrival of the Crusaders and the reduction of the size of the walled area may have been a practical resposnse to a situation which had occurred before their arrival. In any case Ramla had already been weakened at the time of the conquest thus the inhabitants fled before the arrival of the Crusaders. Although the town recovered in the twelfth century by the thirteenth century it seems to have been more or less a ghost town as indicated by Yaqut (Le Strange 1890, 308). Other cities also suffered from the continuation of warfare throughout the period. For example at the time of its capture in 1153 Ascalon was a large walled city covering an area of fifty hectares with a population estimated at 10,000[5]. By 1240 the city appears to have been deserted with only a castle standing in the north-west corner of the site.

[4] The fact that 'Athlit did not continue as a town is a result of the Mamluk policy of destroying the port cities.

[5] I would suggest a more conservative population estimate of 60[illegible] based on the area enclosed within the walls.

6. AYYUBID AND MAMLUK PERIODS

History

The Muslim re-conquest of Palestine was a slow process carried out over a period of approximately 100 years (from Saladin's capture of Jerusalem in 1187 to the fall of Acre in 1291) and involving numerous battles and smaller skirmishes which gradually diminished its urban centres. The emergence of the Mamluks as a strong unified political force in the second half of the thirteenth century brought order to an otherwise confusing mosaic of territories, alliances and personalities which characterised the final years of the Crusader Kingdom[1] (**Figs. 17, 18 and 19**). Despite its religious and political importance to the Muslims, Palestine was still regarded as vulnerable to renewed attacks from Western Europe. As a result, with a few notable exceptions, the cities of the area were not developed and in some cases deliberately destroyed (see below coastal cities). Another legacy of the Crusader period was the large number of fortresses built throughout the country which later served as nuclei for urban development.

The Crusaders were not the only enemy with which the Mamluks had to deal - to the east were the Mongols who had destroyed numerous Muslim town and cities. In many ways the Mongols were a more serious threat to the Mamluks because they were able to attack across a broad front whereas the Crusader threat was mostly restricted to the Mediterranean coast. In 1260 the Mamluks inflicted the first serious defeat on the Mongols at the battle of 'Ayn Jalut to the west of Baysan. However the Mongol threat remained significant throughout the thirteenth century for example in 1280 Aleppo was pillaged and burnt and in 699AH (1299-1300) both Aleppo and Damascus were sacked. The Mongol threat was finally ended in 1322 when a peace was signed between the Mamluk Sultan al-Nasir Muhammad and the Il-Khan ruler of Iran[2].

For the remaining two hundred years of Mamluk rule Bilad al-Sham enjoyed its longest period of peace for many centuries. The stability allowed a large number of building projects to be carried out in towns and cities to repair the damage wrought by warfare (see for examples Meinicke 1992). However it should also be pointed out that that the peace was not entirely uninterrupted due to a virtual civil war which took place between Mamluk factions from 1388-1422. There were also a number of other factors which could have a negative effect on populations such as plagues, famines and changes in the global trade pattern.

[1] For a good recent account of the Mamluks see Irwin 1986.

[2] For relations between the Mongols and Mamluks see Amitai Preiss 1995.

Administration

The Mamluk state was an amalgam of the former Ayyubid principalities of inland Syria and the former Crusader territories of the coast with Egypt. According to this arrangement Cairo remained the capital of the empire and Damascus developed as a second capital with control over Syria. The Mamlakat (kingdom) Dimashq was subdivided into a number of parts which included the *niyabas* of Filastin and Urdunn. (The area of modern Jordan south of the Wadi Mujib belonged to a separate province the Mamlakat of Karak).

New Towns

Although it is well known that new towns were founded during the early Islamic period the instances of the creation of new towns during the medieval period is less well known and has generally not been commented on. Part of the reason that medieval new towns have not been noticed by modern historians is that in most cases they were not commented on by contemporary writers. Examples of Islamic new towns from the medieval period include Qasr al-Seghir in Morocco founded by the Almohad Sultan al-Mansur in 1184 (cf Redman 1986). Other examples include the building of the Seljuk capital of Merv next to the old city in the eleventh century (**Fig. 23**) (Herrmann and Petersen 1997, 30) and the construction of Sultaniyya by the Mongol ruler Öljeitü in 1313 (Pope 1965, 172). Within the area of Bilad al-Sham the only example of a new town that it generally acknowledged is the city of Tripoli which was re-founded at a site two miles inland from the old city (Dimashqi trans. Mehren, 207; Ibn Battutah trans Defremery and Sanguinetti, 1, 137-38). The core of the new city was the Crusader castle built by Raymond Count of Tripoli (which in its turn stood on the site of an earlier Muslim fortress). The other main building in the town was the Great Mosque built in 1294 as the religious centre of the new city on the site of the former Crusader cathedral. Between these two buildings there was a single East-West street with side streets leading off at right angles which formed the basis of the urban layout. Significantly there was no town wall other than the sides of buildings. The chief defensive feature was the river to the north and the citadel which is located on a prominent spur (Salam-Liebich 1983).

Other examples of towns which developed under the Mamluks include Ajlun, Karak and Hesban. Although each of these settlements existed before the eleventh century their urban development is mostly a product of the medieval period (11^{th}-16^{th} centuries). Karak was established as an important fortress under the Crusaders with an attached civilian settlement (William of Tyre ed. Huygens, XII, 29(28). Unfortunately the archaeology of the medieval town has yet to be investigated though the

Table 2

Name of town	mosques	churches	bathouses	khans	hospitals	Madrassas
Ramla	5 [13] (a)	2 (b)	1(c)	2 (a)	1	1
Nablus	4 (b)		2		1 (b)	
Hebron	2		1			
Safed	3		1	1		
Gaza	9	1	1 (e)	2 (e)	1 (e)	
Jerusalem	5	20	5	5+	1	5+

Main towns in Palestine in the late Mamluk period (fifteenth century)
Petersen 1995, (b) Pringle, II, and 195-198 (c) Dow 109, (d) Cohen & Lewis 1978 (e) Heyd 1960, (f) Petersen 2001.

importance attached to the town in the Mamluk period can be gauged by the fact that it was capital of a Mamlakat (province). Similarly the Ayyubid castle of 'Ajlun was associated with an urban development (Johns 1931). Unfortunately this town is also in need of archaeological investigation to determine the nature of the medieval town[3]. On the other hand the development of Hesban into a major centre during the Mamluk period has been the subject of an intensive archaeological and historical investigation (see for example Ferch et al 1989 esp. 27-35 and De Vries 1993). After relatively sparse occupation during the Ayyubid period the settlement was remodelled during the early Mamluk period and provided with various building indicative of an urban site including large underground cisterns, a caravanserai and a bath house (De Vries 1993 esp 164). During this period Hesban functioned as the capital of the Balqa replacing Amman which by this time was scarcely populated (Abu al-Fida ed. Renaud and de Slane 1840, 245).

The principal new town founded in Palestine was Safed (**Fig 43**). This was a similar development to Tripoli and Karak with the new town built around the base of the Crusader fortress. Although there is some evidence of a Crusader town at the site it appears to have been fairly small and does not compare with the town later developed by the Mamluks with its many mosques, khans and bathhouses (Abu al-Fida, ed. Renaud and de Slane, 243; Mayer and Pinkerfeld 1950, 41 ff.).

Another possible candidate for the status of new town is Qaqun which also had a Crusader fortress at its centre (Pringle 1986, 58-71). Under the Mamluks Qaqun was developed as a regional administrative centre and Qalqashandi (ed Ali, IV, 100) described it as a pleasant town. The area in the immediate vicinity of the Crusader castle was, until 1948, occupied by a Palestinian village which was subsequently destroyed hampering any attempts to identify the Mamluk settlement (Khalidi 1992, 559-60).

[3] Johns was engaged on a project, which documented the medieval town although unfortunately this has not been published. His unpublished papers on the town are in the care of the Palestine Exploration Fund in London.

In addition to the towns recognized by Mamluk administrators there are a number of settlements which appear to merit urban status even though they were referred to as villages. The most notable example of this phenomenon is Majdal located to the north east of the destroyed city of Ascalon (**Fig. 48, Plates 22-25**). The village had a Friday Mosque (Meinicke 1992, II, 91) and a market place and a sizeable population which, at the end of the Mamluk period, was twice that of Ramla (Cohen and Lewis 1978, 19).

Discontinued Towns

Under the Crusaders there were thirty-six settlements within our area which from an administrative point of view may be classed as towns (Pringle 1997, 3-5). It appears that at least some of these were only towns in the technical sense (i.e. they had burgess courts but were very small) thus it is difficult to class settlements such as al-Ram, al-Bira, Qubaiba, Dabburiya, Bait Suriq as urban settlements. However removing these names from the list of towns still leaves a considerably larger number of urban settlements than under the Mamluks. The main reason for the decline in urban settlement was the destruction of the coastal towns which not only removed those towns but inhibited development throughout the coastal plain. An example of the effects of this policy on inland towns can be seen by looking at Qaimun which was re-developed as a new town in the Fatimid period and continued to develop under Crusader rule yet was virtually abandoned during the Mamluk period presumably because of the demise of nearby Haifa (Ben Tor et al 1996). However there were also towns which appear to have disappeared away from the coast the most prominent of these are Baysan and Tiberias. Although there is evidence for continued settlement of these sites neither were recorded as towns in Mamluk documents perhaps indicating destruction by the Mongols. More significantly the archaeological evidence indicates a reduced area of settlement at both sites with a level of occupation equivalent to that of villages. The cause of this decline is not known although in both cases it appears to predate the Mamluk period. There are, however some other cases which might be a result of deliberate neglect thus Lydda was allowed to decline to the benefit of Ramla (though by the sixteenth century there was not much difference in the size of their populations cf Cohen and Lewis 1978, 19).

Continuously inhabited Towns

With the coastal cities destroyed and many of the interior towns in a depressed condition the urban infrastructure was severely damaged. Most of the towns that survived were located in the hills to the east of the coastal plain, in particular Nablus (**Fig.21**), Jerusalem (**Fig.20**) and Hebron. Other towns which survived but were in a much reduced condition include Bayt Jibrin, Ramla and Yibna. The only coastal town which was allowed to remain undemolished was Gaza, presumably because of its proximity to Egypt and position on the main road linking Cairo with Damascus.

With the exception of Bayt Jibrin all of these towns were subject to substantial rebuilding carried out at the expense of Mamluk officals. As might be expected Jerusalem received the greatest amount of investment with the area of the Haram and its immediate vicinity being selected for particular attention (for examples see Burgoyne 1983). Against this general burst of construction is the fact that the city was left unwalled as a precaution against potential Crusader occupation. A similar policy was adopted at other towns in Palestine and it is notable that the defences in all these towns were reduced to citadels (usually the former Crusader castle). It is notable that some Mamluk towns outside Palestine had walls: for example Damascus and Aleppo were both enclosed with walls and even the coastal port of Beirut was partially walled.

Neither of the other two hill towns, Hebron and Nablus, appear to have been particularly important in early Islamic times but they became the focus for urban development after the destruction of the coastal cities. Unfortunately the archaeology of both cities has not been investigated in detail beyond the major monuments and any comments must be provisional.

Nablus suffered during the twelfth and thirteenth centuries not only from warfare between the Crusaders and Muslims (the town was sacked in 1133, 1137, 1184, 1187 and 1242) but also because of its location which makes it extremely vulnerable to earthquakes (earthquakes occurred in 1182, 1201 and 1202). During the Mamluk period there appears to have been a certain amount of urban renewal including the re-conversion of the Crusader Church back into a Friday Mosque. Extant buildings dated to the Mamluk period include Jami Hizn Sidna Ya'qub built, or re-built 1288-90, the Mausoleum of Shaykh Badran (672 AH/1273-4 AD) and Hammam al-Baydarah (672 AH/1273/4 AD) in addition there are a number of Mamluk buildings which were destroyed in more recent earthquakes (**Fig. 21**).

In some ways Hebron could be considered a new town because it was only described as a village in earlier Islamic sources such as Muqaddasi and Nasir-i-Khusraw. During the Crusader period Hebron had a burgess court and technically qualified as a town. This change in the status is remarked by the geographer al-Idrissi who stated in 1154 that it was a village which had become a city. However little is known of either the Crusader or earlier Muslim occupation outside the Haram with the exception of a house excavated in the 1960s by Hammond (1965, 1966 and 1968). Whatever the status of Hebron under the Crusaders and earlier it is clear that under the Mamluks it had attained the status of a city with numerous mosques, madrassas, bathhouses ribats and zawiyahs. As in Jerusalem the attention of Mamluk investment was the area of the Haram or sacred area which in Hebron enclosed the tombs of the patriarchs Abraham, Isaac and Jacob. Some idea of the status of Hebron during this period can be gauged by the fact that Mujir al-Din entitled his work *al- uns al jalil bi tarikh al-Quds wa al-Khalil* (a description of Jerusalem and Hebron). Presumably the enhanced status of Hebron was connected with its religious significance although it may also have been a result of population movements away from the destroyed coastal region. The removal of the minbar from the Friday mosque in Ascalon to Hebron supports both of these propositions (Mujir al-Din trans. Sauvaire, 16).

The only hill town which did not thrive in the Mamluk period is Bayt Jibrin which in any case was more easily accessible from the coastal plain. Although the town was not deliberately destroyed it does appear to have been reduced to the status of a village attached to a fortress. In any case there is some question as to the condition of the town before this period thus Muqaddasi in the tenth century notes that the population of the area was in decline. The situation does not appear to have improved by the mid-twelfth century (before 1160) when the Hospitallers were granted a charter encouraging the development of a civilian settlement around the castle (*Cart. des Hosp.*,I, 272-3, no.399) implying that the settlement still had a small population.

Gaza (**Fig. 22**) was second only to Jerusalem in the scale of investment and the number of buildings erected during the Mamluk period and in political terms it was more important- at least during the first part of Mamluk rule (i.e. under the Bahri Mamluks) (Sadek 1991). It is possible that the enhanced status of Gaza in the Mamluk period was derived not only from its proximity to Egypt (which would of course make it a favoured posting amongst Mamluk amirs) but also from the movement of population from other coastal towns (in particular the destroyed city of Ascalon).

The only other major city on the coastal plain was Ramla (**Fig.61**), which at the beginning of the Mamluk period appears to have been in ruins. Considerable efforts were made to revive the fortunes of the town which included the re-building of the White Mosque by Baybars. There is some indication that these efforts were successful, thus in the early fourteenth century Ramla was described as the most populous town in Palestine (Abu al-Fida ed. Renaud & de Slane 226-7). However this may simply be a reflection of the sorrowful condition of other towns rather than an indication of the vitality of Ramla as other fourteenth century sources describe Ramla as largely ruined (see for example Ibn Battuta trans. Le Strange 1890, 308).

7. EARLY OTTOMAN PERIOD

History

In research terms the main difference between the Ottoman period and earlier times is that for the first time detailed figures of population and revenue are available (see for example Hütteroth and Abdulfattah 1977; Cohen and Lewis 1978; Bakhit 1982; Heyd 1960 and more recently Singer 1994). Whilst this data is very useful and is amenable to statistical analysis it does present one with the problem of how to compare this period with earlier periods. The problem is made particularly difficult by the fact that very little archaeological research has been concerned with the Ottoman period. There a number of reasons for this situation though the implicit preference for historical documents over archaeological evidence is a major factor. The flaws in an over reliance on historical documents of this period have been pointed out by Johns (1992) who emphasises the corrective influence of archaeology[1].

The Ottoman conquest in 1516 does not appear to have been a revolutionary change for the Bilad al-Sham in general and Palestine in particular. Like the Mamluks the Ottomans were a Turkish dynasty with a similar attitudes to the Muslim religion. Evidence of the continuity can be seen from the fact that the Mamluk governor of Damascus Janbirdi al-Ghazali was allowed to remain in office after the Ottoman conquest until his rebellion in 1521. Similarly the Mamluk governor of Aleppo was transferred or promoted to the same post in Cairo by the new Ottoman rulers (Bakhit 1982). The main differences between the two regimes were that the Ottomans had developed a more advanced military capability (in particular firearms and the use of a navy) and were based in Constantinople rather than Cairo. During the first century of Ottoman rule there was a change in the importance of Syria. Damascus in particular was given added importance and was made the starting point of the official Hajj caravans, which under the Mamluks had always started from Cairo (Bakhit 1982, 107-115).

Administration

Under the Ottomans Palestine, along with most of Syria, became part of the Ottoman province of Damascus which was subdivided into a number of Sanjaks. Palestine was divided into four (later five) sanjaks of Jerusalem, Gaza, Nablus and Safed (Bakhit 1982, 91; Cohen and Lewis 1978, 13).). A fifth area, apparently without an urban centre, known as the *ikta* of Turabay was later (1583) converted into the Sanjak of Lejjun. In addition to the four towns recognized as the heads of Sanjaks two other towns were also recognized: Ramla and Hebron. Three words are used to denote towns in Ottoman documents these are *kasaba*, *şehir* and *madina*. *Kasaba* and *şehir* are both Ottoman technical terms with precise meanings thus *şehir* specifically refers to a town whilst *kasaba* refers to a place which is the administrative centre of a district, in particular the seat of a *na'ib* (deputy-judge). *Madina* is an Arabic word which does not have a specific meaning in Ottoman administrative language though it is used to describe Hebron in official Turkish documents. It has been suggested that the terms is used for Hebron because although it did not figure as a town in fiscal terms it retained some status as a religious centre[2].

New Towns

There are no examples of new towns created under Ottoman rule in Bilad al-Sham during the sixteenth century[3]. There are, however a few villages which appear to have grown in importance possibly attaining urban attributes thus both Lajjun and Jenin within the *Ikta Tarabay* (later Sanjak of Jenin) appear to have developed as important local centres. For example a letter (*hüküm*) dated 1589 addressed to Assaf bin Tarabay states that he is allowed to settle in the small *town* of Lejjun (Heyd 1960,53). Unfortunately there has been very little archaeological investigation of the site though the existence of a fourteenth century caravanserai and a medieval bridge indicate that the site was already of some importance under the Mamluks (Petersen 2001,201-202). Other settlements grew to a significant size where they could be classified as urban thus eleven villages had a population in excess of 1000 and at least three had a population in excess of 2000 (see **Appendix 2**, Table 9).

Settlements with a **Population** exceeding 2000 people (**Figs. 25** and **26**)

The most notable of these is Majdal which had a population of 2795 (i.e ranked sixth) exceeding that of Ramla and nearly equalling Hebron during the same period. The impression of importance is confirmed when one looks at revenue where again Majdal is ranked sixth ahead of Hebron during the same period. The range of taxes raised at Majdal also provide evidence for urban status and it is notable that it has a general market tax. Further confirmation for urban status is provided by the fact that Majdal had its own *qadi* (Heyd 1960, 42 & 145-6, No.93). The only reason Majdal has not generally been

[1] For a review of Ottoman archaeology of Palestine see Schick (1997-8).

[2] Cohen and Lewis (1978, 112, note 42) argue that the use of the word *madina* in the later registers (1538-9, 1553-4 1562 and 1596) are meant to indicate that 'as regards its effective fiscal and perhaps also administrative status Hebron was a village… the use of the Arabic term *madina* … indicates that its urban status was purely honorific, in recognition of its religious importance.' Whilst this argument may have some merit is respect of fiscal matters it ignores the fact that in later registers where the term *madina* is used the population had recovered to significant levels and was comparable with other towns such as Nablus and exceeded that of Ramla which was still referred to as a *Şehir* (i.e the normal Ottoman term for a city).

[3] The founding of Beersheba in the early twentieth century is one of the few examples of Ottoman new towns in the region.

Table 3

Name of Town	mosques	churches	bathhouses	khans
Ramla	6/14(a)	1 / 2 (b)	1 (c)	2 (a)
Nablus	4 (b)		2 (c)	
Hebron	2 (b) & (d)		2(d)	2(d)
Safed	5 (d)		1 (d)	1 (f)
Gaza	9 (d)	1	3 (c)	2 (d)
Jerusalem	5 (d)	20	5(d)	

Main towns in Palestine in the sixteenth century

Petersen 1995, (b) Pringle, II, and 195-198 (c) Dow 109, (d) Cohen & Lewis 1978 (e) Heyd 1960, (f) Petersen 2001.

recognized as a town is probably that it was a relatively new settlement[4].

The largest settlement after Majdal was Kafr Kanna located in Galilee approximately midway between Nablus and Safed. Although listed as a village the settlement had a population similar to that of Majdal (2605 in 1595) and revenues higher than Hebron during the same period. Significantly this was the only village in Palestine which paid taxes on separate market activities which was usually a characteristic of urban revenue (see Hütteroth and Abdulfattah 1977, 87 Fig.8). Kafr Kanna also had its own *qadi* which suggests administrative recognition of its urban status (Heyd 1960, 42).

The third village with a population in excess of 2000 is Ludd/Lydda next to Ramla. The presence of a general market tax indicates significant commercial activity more usually associated with urban settlements. The proximity of Ramla suggests that the two settlements should perhaps be treated as a single urban area.

Settlements with a population in excess of 1000 people

Eight villages in the AD1596 tax registers had a population in excess of 1000 and less than 2000. Some of these had previously been urban settlements; thus Nazareth, Dayr Darum, and Bethlehem had all once been towns. Nazareth and Bethlehem were both important during the period of the Crusades as religious centres (cf Pringle 1997, 4 Table 1). Their continued importance during the Ottoman period can perhaps be attributed to continuing Christian pilgrimage though significantly few Christians are registered in Nazareth in the late sixteenth century (Hütteroth and Abdulfattah 1977, 188). On the other hand Dayr Darum's continued importance may be attributed to its proximity to Gaza and its position on the via Maris. Safuriyya had also once been a town though it appears to have been of negligible importance during the Crusades and its growth a product of the Ottoman period. There are a number of other villages of considerable size whose growth must have been a product of the Ottoman period. Amongst these are Jabalya and Buryar both of which lie approximately 10km from Gaza and probably benefited from the growth of the latter and the extinction of Ascalon. The previously unknown village of 'Alma presumably owes its large population (1440) and considerable revenue to its proximity to the growing town of Safed. Similalry Bayt Jala (and Bethlehem) which lies within ten miles of Jerusalem owes its growth to the success of the latter. The fact that Bayt Jala is located two kilometres from Bethlehem suggests that the two together should perhaps be regarded as an urban area though Singer (1994, 80-85) rejects this idea[5].

One other factor possibly affecting the pattern of urbanization was the construction of fortresses by the Ottomans during the first century of Ottoman rule. Although the prime purpose of these fortresses was to control the road system and enforce Ottoman authority in the countryside they may have been intended to form the nuclei of future settlements (this is stated explicitly in a *firman* establishing the fortress at Arish (Heyd 1960, 103)). It is for example notable that the town of Jenin appears to have developed after a *firman* of 1564 ordering the conversion of the ruinous (Mamluk?) caravanserai into a fortress (Heyd 1960, 104-5). Similarly the refortification of Bayt Jibrin (Heyd 1960,42, 115-6) may have been part of an attempt to revive the fortunes of this formerly important town. By 1596 the population had dwindled to 250 (Hütteroth and Abdulfattah 1977, 149) although it still retained its own *qadi* (Heyd 1960, 42).

Discontinued Towns

Although there are no examples of towns disappearing during this period some of the settlements still classed as towns in Mamluk times were no longer accorded this title. For example although Tiberias was capital of a *nahiya* it was not recognised as a town in Ottoman documents. This was despite significant attempts to repopulate the town including the rebuilding of the town wall in 1562 (Heyd 1960, 140-2). Likewise Yibna, which was described as a town in the thirteenth century had declined to the status of a village in the sixteenth century with an estimated population of 645 (Hütteroth and Abdulfattah 1977, 143). Baysan also appears to have further declined so that by the end of the sixteenth century it had a population of little more than 200. In this connection it may be significant that the nearby

[4] This status was achieved after 1918 under the British Mandate.

[5] Singer rejects the idea that Bethlehem and Bayt Jala could be regarded as towns because of the absence of market taxes or road tolls. However as she admits both were very populous and hetrogenous in their population. I would suggest that they were not given official urban status because of the preponderance of Christians though in economic terms they may have functioned as towns without official recognition.

caravanserai (Khan al Ahmar) is not mentioned in Ottoman documents of this period.

The poor condition of Tiberias, Yibna and Baysan represents the latest phase in a decline which had begun before the thirteenth century. On the other hand the decline of Qaqun represents the sudden extinction of a Mamluk regional centre. Under the Mamluks it had served as a regional capital and had many of the attributes of a town including a caravanserai and bathhouse (Qalqashandi ed Ali, IV, 100). However it appears that it was primarily a Mamluk military base (Pringle 1986,60). Under the Ottomans military power for the area passed to the Tarabay family who were based at Lajjun (Bakhit 1982, 209-11) making Qaqun redundant. However some memory of its importance was retained in the administrative district known as the *nahiya* of Qaqun and the fact that there was a toll station in the village (Hütteroth and Abdulfattah 1977, 94 Fig 9).

More significantly some of the towns recognised as such by the Ottoman authorities had very small populations and appear to have been in danger of losing their urban status. For example in 1525 Hebron had a population of 665 which was smaller than many villages (Cohen and Lewis 1978, 111, Table 2). It is, perhaps, for this reason that Hebron was classed as a rural settlement in fiscal terms though it was still referred to as a *madina* in religious and administrative terms[6]. The other example is Ramla whose population fell from just over two thousand (2016) in 1525 to just over fifteen hundred (1698) in 1596 when it was smaller than fourteen larger settlements including eight which were classified as villages (see Appendix 1 Table 9). However set against this view of demographic decline it should be noted that Ramla is ranked fifth in terms of revenue for the same period confirming its urban status.

The Main Cities

The majority of towns and cities in the former Mamluk province of Damascus continued to develop as they had under the Mamluks and in the majority of cases there is little obvious indication of the new Ottoman rulers outside the major cities. The process of the 'Ottomanization' of Damascus has been well described by Weber and Meinecke who describe three phases 1) continuity 2) importation of elements of imperial architecture and design and 3) an assimilation or symbiosis of Ottoman and native/Mamluk architecture. The first two phases took place during the sixteenth century whilst the third phase is a seventeenth century phenomenon. A similar process can be observed in Jerusalem which was the only town in Palestine to receive direct imperial involvement in its architecture and urban planning (see eds. Auld & Hillenbrand 2000 for a full description of Ottoman Jerusalem). The main features of the Ottoman urban renewal were repairing the infrastructure and embellishing the city with decorative features and the re-building of the city walls. Work on the infrastructure was primarily concerned with renewing the city's water supply and included renovating cisterns, building aqueducts and providing outlets in the city in the form of *sabils*. The embellishment of the city was primarily concerned with the area of the Haram and included as its most spectacular feature the covering of the *Qubbat al-Sakhra* (Dome of the Rock) with faience tiles made with a new technique which enabled the use of underglaze red painting. Rebuilding the city wall was probably the most high-profile and expensive undertaking and may also have been aimed at economic regeneration. The fact that no other city in Palestine was enclosed by walls at this time will have emphasised its singular importance and may have been intended to indicate that Jerusalem was to replace Gaza as the chief city.

Although Jerusalem will have looked very different by the end of the sixteenth century there was very little about the improvements that looked specifically Ottoman. There were for example no Ottoman style complexes such as the Tekiyye in Damascus which appears to have been a direct Ottoman import (Goodwin 1971, 256). Similarly there were no pencil shaped minarets or large single domed mosques. In other words the influence of imperial Ottoman architecture appears to have been even more limited than in Damascus perhaps indicating that the Ottomans wished to preserve the existing religious character of the city.

The Ottoman influence in the architecture of the other cities was even less marked thus there is no record of Ottoman construction in Ramla, Hebron, Safed or Nablus to match that carried out in Jerusalem. In fact apart from Jerusalem Ottoman building activity in the sixteenth century appears to have been confined to the construction of fortresses. This may be compared with the beginning of Mamluk rule in the thirteenth century when al-Zahir Baybars initiated an ambitious programme of renovation of shrine and other religious buildings in towns throughout the country. The difference may be partly explained by the fact that the Mamluks wanted to celebrate the Muslim reconquest of Palestine whereas for the Ottomans Palestine was only one of a number of territories acquired in the sixteenth century.

Urban Population

The plentiful data provided by the Ottoman censuses of the sixteenth century enables comparisons of population and revenue both between towns and between urban and rural areas (see **Appendix 2** for information on which the following section is based). The most revealing statistic is that at the end of the sixteenth century the combined urban population of Palestine was still less than that of the city of Damascus. The population of the largest Palestinian city, Jerusalem was only equivalent to that of Ba'albak indicating the provincial status of even the largest Palestinian city. The significance of the towns is not much enhanced when comparisons are made between the urban and rural populations. For example the majority

[6] See above note 2.

of the population was rural, 71.6% (168290) whilst only 18.4% (38000) lived in the six main towns. Even when the large villages (i.e. with a population over 1000) are added to the list the urban population is still only 28.5% (58871) compared with a rural population which comprised 71.5% (i.e. 200419) of the total. The situation is similar when one compares urban revenue with rural revenue, reinforcing the view that the economy of Palestine was predominantly rural.

The primary function of the towns was therefore to service the large rural population providing markets, justice and contact with the wider world. During the sixteenth century the population of the towns increased markedly, though towards the end there was a slight reduction, though not to the levels at the beginning of the century. The growth in the urban population may be a result of a growth in the area under cultivation as Hütteroth and Abdulfattah estimate that by the end of the century nearly the maximum [illegible] into cultivation (1977, 65-6)[7]. However [illegible]arily high revenue of Safed in 1596 in comparison to the surrounding countryside suggests that its economy had a significant industrial and mercantile component. This is confirmed by a detailed examination of the tax registers which show that in the 1560's Safed had a smaller population yet had a consistently higher market activity than Jerusalem. For example when Jerusalem paid 23,000 *akçes* for the general market tax (*ihtisab*) Safed paid 80,000 *akçes* (i.e.more than three times as much).

One further feature of Ottoman urban populations which should be noted is their hetrogenous character. Whereas over 95% of villages had only Muslim inhabitants, 100% of towns had a mixed population which included either Jews, Christians and Samaritans as well as Muslims[7].

[7] The mixture of different religious groups as part of the urban fa[illegible] will be discussed in greater detail in the conclusion.

8. NEGEV TOWNS

Introduction

Climate and landscape

The Negev today is a harsh desert area bordered on the east by the Wadi Arabah and on the west by the Sinai. It has an average annual rainfall below 200mm for the northern part and less than 100mm for the central and southern parts. The rainfall can be subject to significant local variation as a result of the altitude which in places reaches nearly 1000 metres above sea level (**Figs. 4** and **29**). The geomorphology of the region is marked by five parallel ridge running North-East to South-West with broad troughs in between and steeply incised wadis (Evenari et al 1982). In the north-west, between Beersheba and Nessana there is a wide area of shifting sand (Hb. *Holot Haluza*) which exists in the form of linear dunes aligned NE-SW of E-W. The dunes originate in the northern Sinai and become progressively younger towards the east (Goldberg 1998, 48-9). The vegetation in the north may be characterised as degraded steppe (Irano-Turanian) and in the south is more desertic (Saharo-Arabian).

Byzantine and Early Islamic Period

The Negev has attracted considerable interest as the most extreme example of depopulation occurring as a result of the Muslim conquests (cf. **Figs 28** and **29**). The main reason for this is the discovery of the ruins of a number of Negev towns in the nineteenth and early twentieth century standing apparently isolated in the middle of the desert[1]. With many buildings still standing to first floor level the towns were seen as dramatic symbols of urban decline under Muslim rule. There are two inter-related assumptions implicit in this view 1) that the towns ceased to exist at the time of the Muslim conquest and 2) that the decline was inextricably linked to the influx of Muslim Arabs. In the rest of this chapter I will challenge these assumptions and suggest both an alternative dating for the decline of the towns and another cause for their abandonment. However first it is necessary to give some idea of the contemporary environment in which these sites are located.

1. Dating the abandonment

The date of the abandonment of these towns is an important question because a single date would suggest a catastrophic event such as a concerted series of attacks whereas a range of dates would suggest a less immediate cause. It is now generally accepted that the towns were abandoned at different dates although establishing precise dates is problematic. The information presented by excavations of the main cities generally shows that there was a high population in the late Byzantine period, with much more limited occupation in the Umayyad period and a decline in the Abbasid period[2]. However this evidence does not fit well with recent rural surveys and excavations which demonstrate significant agricultural settlement of many desert areas up to the end of the tenth century (see for example Avner and Magness 1998 and Haiman 1989). An important factor in this apparent contradiction is the way that research was carried out. On the whole the Negev cities were excavated in the early years of Israeli rule (i.e. 1948-70) either as part of research excavations or as part of a policy of making the sites accessible to the public. On the other hand the work outside the cities, in the rural and desert hinterlands, is primarily a result of more recent emergency survey work carried out during the 1980s and 1990s[3]. The difference in the results is therefore both a question of methodology and a refinement of techniques. The work in the cities was generally carried out with ready made theories about their origin and decline whilst the work in the open areas was carried out as rescue archaeology with fewer preconceptions. Similarly the techniques for dating ceramics and assessing coin evidence have considerably improved. In particular it is now recognised that Byzantine types of pottery continued to be produced well into the early Islamic period (see section on pottery).

In the light of the above comments it can be seen that any conclusions about the fate of cities during the Islamic period are provisional and must await a re-investigation of the urban archaeology of the area (see for example Figueras 1994, 28 referring to recent excavations at Oboda/Avdat). However a few general observations can be made based on information currently available (detailed summaries of each site will follow in the next section). The first is that the towns were abandoned at different times over a period spanning several centuries. For example Kurnub/Mampsis, Oboda/Avdat and Khalasa/Elusa were probably abandoned before the Muslim conquest, perhaps as a result of the 631 earthquake which affected the eastern Negev (cf Figueras 1994, 283-5). The one Negev town where the Muslim conquest appears to have had a definite effect is Ruheiba/Rehovot. This is a large town of Nabatean origin which was largely unknown from contemporary documents. It seems to have been abandoned during the first fifty years of Muslim rule perhaps because its main economy, supplying the needs of pilgrims to Mount

[1] It should be noted that at the end of the nineteenth century southern Palestine was probably at its lowest level of population for thousands of years (cf Hütteroth and Abdulfattah 1977, 54-63 and especially Fig.7).

[2] The population estimates given by most authors appear to be too high. Even the 'conservative' estimates given by Mayerson (1987, 235) and others seem larger than the evidence will justify. Using the same methods that I have adopted for medieval sites I would suggest the following figures Khalasa/Elusa 3500, Auja/Nessana 1800, Ruheiba/Rehovot 1200, Isbaita/Shivta 1100, Kurnub/Mampsis 500.

[3] The Negev emergency surveys took place as a result of Israel's military withdrawal from the Sinai and subsequent redeployment in the Negev. The first surveys were carried out in 1978 and are ongoing.

Table 4. Summary of Negev Towns

	4th century	5th century	6th century	7th century	8th century
Kurnub/Mampsis	X	X	X	?	0
Khalasa/Elusa	X	X	X	0	0
Isbaita/Shivta	X	X	X	X	X
Beersheba	X	X	X	X	?
Oboda/Avdat	X	X	X	0	0
Ruheiba/Rehovot	X	X	X	X	?
Auja/Nessana	X	X	X	X	X
Ayla/Aqaba	X	X	X	X	X
Kh.Futais	0	X	X	X	X

X = inhabited for most of the century concerned
0 = no evidence of permanent occupation during the century
? = possibility of occupation during this century

Sinai, had collapsed.

The remaining towns all have considerable evidence for occupation in the Umayyad period and later. The smallest of these Isbaita/Shivta was occupied until the ninth century at least (Figueras 1994, 282 questions this date but provides no plausible alternative). It is the only Negev town to contain the remains of a mosque which was apparently used at the same time as a church to which it was attached. Another town, usually ignored in discussions of the Negev, is Khirbat Futais/Pattish located to the North-West of Beersheba. Archaeological excavations have demonstrated extensive occupation from the Byzantine to the Fatimid period. Nessana (Auja Hafir) is the best documented site of the area with a range of administrative documents found in the church the latest dating to the late seventh century. It is generally assumed that the occupation of the site stopped shortly after the latest document (i.e. at the end of the Umayyad period) though recent work by Magness (2000) suggests that the town continued to function into the Abbasid period (i.e. post 750 AD).

The largest towns, Beersheba and Aqaba, were located at the northern and southern extremes of the Negev. The administrative status of Beersheba in Byzantine times is a matter of some discussion though the presence of a Roman fort and fragments of inscriptions bearing imperial decrees suggests that it had some administrative role[4]. Unfortunately the Ottoman Turks destroyed most of the early remains before the First World War during the rebuilding of the town and most recent archaeology has taken place outside the presumed area of the early town. The results of archaeological excavations that have taken place indicate considerable continuity between the late Byzantine, Umayyad and Abbasid periods. More significantly 'a rather sumptuous villa' was built near the centre of the ancient town in the Umayyad period possibly representing the residence of an early Muslim notable ('Amr ibn al-'As ?). Unfortunately without more information from the early city centre it is not possible to ascertain the nature of occupation during this time though it is tempting to see the villa and bathhouse as forming the centre of a large urban settlement.

Whereas the archaeological evidence from Beersheba is fragmentary the excavated remains at Aqaba provide the clearest evidence for continuity and urban growth in the early Muslim period. The prosperity of the city in the Muslim period also appears to have had a significant effect on the hinterland thus, Avner and Magness (1998, 52) note that the area to the north of 'Aqaba thrived during the eighth and ninth centuries.

2. Reasons for the Abandonment

The older explanations of destruction by the Muslim Arabs as part of their initial wave of conquest have now largely been abandoned in favour of more subtle explanations which see the depopulation of this area as a result of changes brought about by the change of regime and religion[5]. Explanations include the collapse of wine production in the area as a result of Muslim attitudes to alcohol (Mayerson 1985, esp. 79), the lessening of Christian pilgrimages trade to Mount Sinai and the destructive effects of pastoral nomadism on the ecology of the region. Whilst each of these explanations could have been a factor in the desertion none of them is entirely satisfactory. For example wine could have been replaced by some other agricultural product and in any case it is probable that the Muslims would not have prevented Christian consumption of wine. Those who see the abandonment of the towns as a result of a decreasing number of Christian pilgrims need only look at accounts of Christian pilgrims from after the Muslim conquest to see that pilgrims continued to travel to Sinai in considerable numbers (cf Mayerson 1987, 11). The third explanation which places the blame for the urban collapse on the infiltration of nomads into the area relies on the

[4] Alt and Avi Yonah suggested that Beersheba was headquarters of the Roman limes although it is now recognised that there is no evidence to support this claim or the suggestion that there was a bishop of Beersheba in the Byzantine period (cf Figueras 1994, 287). However this should not detract from the physical remains which clearly indicate that this was a place of some importance.

[5] For a recent example see Figueras who states 'In summary ...we could say that despite its non-violent character the drastic change of regime must be seen as the real cause... for the quick decline and final disappearance of these communities' (1994, 292).

old assumption of a conflict between the desert and the sown whereas more recent writers have tended to emphasise the degree of reciprocity between nomads, agriculturalists and urban dwellers[6].

Another explanation which has received comparatively little attention is the question of climate change. It has been argued that the climate entered a wetter phase in the Byzantine and early Islamic period[7]. Although there is no scholarly consensus on the subject it is worth noting that even a minor change in the climate would have a drastic effect on the marginal land on which the agriculture of the cities depended (MacDonald 2001, 598-9). Also it is worth noting that the fact of environmental change is not disputed but rather whether it was a cause or effect of other changes.

If the climatic change was caused by human activity this could equally have been a result of over cultivation rather than over-grazing. Indeed it is instructive to note the location of the urban settlements near or just below the 100mm isothete. It is also worth noting that there is extensive evidence for agricultural settlement further south, well below the 100mm isothete, during the Islamic period (Haiman 1990). The dating of these agricultural settlements to the Islamic period is confirmed by the presence of mosques (Avni 1994). South of the farmsteads in the area below the 50mm. isothete, there is considerable evidence for pastoral nomadism which is probably contemporary with the agricultural settlements further north (i.e. also associated with mosques Avni 1994; Rosen 1994). In other words there is a three tier system of land utilization; in the north are the towns with their agricultural hinterlands, in the middle are smaller agrarian villages and in the south are the pastoral nomads. All three of these zones were probably dependant on each other so that a failure or imbalance in one of these areas would have an impact on the others. During the Byzantine/Early Islamic period all three zones were exploited to a maximum with the pressure coming from the towns and it seems likely that the area was not able to support such intensive utilization without a major environmental impact.

The Medieval Period

The medieval period in the Negev is not a subject that has received much attention either archaeologically or historically. The reasons for this are that all the urban settlements and most rural permanent settlements appear to have ceased by the eleventh century. The one exception to this is Aqaba which continued to be inhabited because of its strategic importance and trade with the east. There is also some evidence of proto-urban development in the desert to the south of Gaza which has been identified by Schaeffer. For example he notes that one site (Site No.83/1) dated to the Mamluk period covers an area of 5.5 hectares which is larger than the walled medieval town of Arsuf before its destruction (Schaefer 1989, 55 and 60). In general, however, the warfare of the eleventh-thirteenth centuries meant that the Negev became an area with a primarily nomadic population. By AD1400 the climate had entered a dry phase making permanent settlement in the area even more unlikely (Ghawanmeh 1995). The towns on the edges (eg. Gaza, Hebron, Ramla and Aqaba and Kerak) functioning as exchange centres between Bedouin and settled population. It also seems likely that the Mamluks discouraged permanent settlement in the area as they had done on the Mediterranean coast in order to create a defensive no-man's land. In this context it should be remembered that the Crusaders had caused major disruption to the Hajj routes from their base at the head of the Gulf of Aqaba. Incidentally it is notable that Muslim pilgrimage routes from Palestine now followed the route to the east of the Wadi Araba via Karak and Shaubak rather than through the Negev (the town of Ayla shifted eastwards to its present site around the castle). On the other hand the Christian pilgrims travelled to Sinai via Gaza.

'Aqaba/Ayla

'Aqaba is located at the most southerly point of Palestine (Palestine Grid 149 883). Although present day 'Aqaba is located in the modern country of Jordan and the nearby town of Eilat is located in Israel historically the area has been considered as part of Palestine (see historical section below). The presence of a fresh water aquifer in an otherwise extremely arid area together with its strategic location have meant that some form of settlement has existed at 'Aqaba since the third millennium BC.

The area available for settlement at the head of the Gulf of Aqaba is limited by the steep mountains to the West and East. The flat area between, which is in effect the bed of the 'Araba flood plain, is subject to inundations in the winters. The exact position of the main settlement has changed over time though it has always been located within a few hundred metres of the shore.

History[8]

The name Elath, which is of uncertain origin is the root of the modern Arabic name of 'Ayla[9]. The modern name

[6] Examples of writers supporting the antagonistic view of nomad settled relations see Mayerson (1986) and Parker (1986) and for those seeing a relationship of mutual benefit see Banning (1986) and Rosen (1994).

[7] The evidence for climate change comes in the form of the widespread occurrence of silts dated to between 1700 and 600 bp. The silts could also have originated from deforestation or overgrazing and more independent tests are required (Goldberg 1986 and 1995).

[8] Historical references; al-Baladhuri, Ibn al- 'Asakir ed. al-Shihabi,XL, Tarajim al-Nisa, 220; Ibn Iyas; al-Mas'udi, Maqrizi, *Khitat* ed. Wiet,iii,228-35; al-Muqaddasi trans. Miquel 231; al-Musabbihi *Akhbar Misr*, 34.

[9] The earliest settlement in the vicinity is the Chalcolithic site of Tell Maquss excavated by Lutfi Khalil and dated to 3,500 BC. However the earliest settlement mentioned in historical sources is the Biblical site of Ezion-Geber which Nelson Glueck identifies with the archaeological site of Tell al-Khulayfa. However Practico (1993, 869-70), who excavated Tell al-Khulayfa in the 1980's more than forty years after

derives from the name 'aqabat 'Ayla or the pass of 'Ayla referring to the location of the medieval town at the entrance to the narrow pass between Jabal Umm Nusayla and the sea. Idrissi in the twelfth century was the first to refer to the town as 'Aqabat 'Ayla though others still referred to it as 'Ayla. By the time of Ibn Iyas in the sixteenth century the town was simply referred to as 'Aqaba[10].

In the first century AD Aila was the southern starting point of a road built by Trajan (98-117 AD) linking it with Bosra in Syria. In the fourth century AD Legio X Fretensis established a base at the site which became headquarters of the prefect. As early as 325 AD Aila was established as the seat of a bishopric (see below for archaeological evidence of early church). During the late sixth and early seventh centuries the town was within territory controlled by the Ghassanids.

The history of the town during the early Islamic period is relatively well documented and we known the names of at least three bishops from the early seventh century[11]. In 630 the last of these bishops, Yuhanna ibn Ru'ba, travelled to Tabuk to meet Muhammad and arrange the surrender of the city to the Muslims. This event is recorded by several Arab historians including al Mas'udi (ed. de Goeje 272), al-Waqidi (ed. Jones, 1031), al-Tabari (ed Guidi I, 1702), Baladhuri (ed. de Goeje, 59) and Ibn Sa'd (ed. Sachau et al. I (2), 28-29). Schick (1995, 247) suggests that Yuhanna may have been a civil ruler rather than a bishop and that his identification as a bishop was 'a literary topos, showing the Christian recognition of Muhammad.' However the fact that Yuhhana is referred to by a non-specific title such as *malik* (king) or *sahib* (ruler) by some of the Arab chroniclers may be a reference to his secular power rather than implying that he was not a bishop[12].

The terms of the peace treaty between Yuhanna and Muhhamad are recorded by a number of historians including al-Baladhuri (*Futuh al-Buldan* ed. de Goeje, 59) who states that Yuhanna agreed to pay a poll tax of 300 dinars at 1 dinar per adult. Schick (1995, 247) takes this as evidence that the adult population of the town had diminished to only 300 adults. Apart from the fact that the amount may be incorrectly reported it is likely that the amount specified refers only to male Christian adults (i.e. does not include women or those who were pagan or Jewish). According to al-Mas'udi the town had a significant Yemeni population at this time that was specifically allowed to continue to travel by sea. In any case recent archaeological work clearly suggests a population greater than 300 adults in the early seventh century (see archaeology below).

Under the Umayyads the poll tax payable by the Christians was increased though it was later reduced by order of the caliph 'Umar II. Other historical references clearly indicate that this was an important city in the early Islamic period; thus Qays ibn Sa'd, the newly appointed governor of Egypt, passed through in 656. Sometime between 661 and 674 a force of 200 men was recruited from the city to serve as police for the governor of Medina. Later, between 685 and 686, Muhammad ibn al-Hanafiya settled in the city with a following of 7,000 men (Ibn Sa'd ed. Sachau et al, 79).

During the Umayyad period the town had a large number of *mawali* (i.e. client converts) who were responsible for helping Muslim pilgrims en route for Mecca. The *mawali* built up a reputation for their theological and legal knowledge so that the city became known as an intellectual centre. The importance of the city during this period is further demonstrated by a number of Arabic inscriptions (both Muslim and Christian) from Rehovot and the Sinai which mention the name Ayla as their place of origin (Sharon 1993). Some details of daily life during this period are known; thus Ibn 'Asakir relates that in the latter part of the seventh century Aban ibn Sa'id ibn al-'As settled in Ayla because he liked its low prices and its peaceful atmosphere (Ibn al-'Asakir ed. al-Shihabi, XL, Tarajim al-Nisa, 220). Although it is possible that the *mawali* fell out of favour in the Abbasid period and may have been persecuted there is no evidence of a decline in the intellectual status of the city which remained a centre of Muslim theology into the eleventh century (for intellectual life in Ayla see Gill 1992,175-178 443-452, 636). However it does seem likely that the Christian population had been reduced by this time and the only non-Muslims mentioned are Jewish (cf Schick 1995 and Gil 1992).

The strategic position of the town and its location on the pilgrimage route meant that strong central control was exercised to keep it under the control of the Abbasids . In 809 the city was at the centre of a rebellion against the Abbasids led by Abu al-Nida. The origin of the rebellion was connected with an increase in the rate of the *kharaj* (i.e.non-Muslim land tax) indicating that the city (or district) still contained a large number of non-Muslims. The rebels took control of the 'Araba area and made an alliance with the Banu Judham, a local tribe. Eventually the revolt was crushed by an army sent from Iraq with additional forces from Egypt and the leader Abu al-Nida was taken and executed on the orders of the caliph Harun al-Rashid (Gill 1992, 410).

The continued importance of the site in the ninth century is demonstrated by al- Ya'qubi 's comment that '...the city of Ayla is a great city on the shore of the Salt Sea, and in it gather the pilgrims of Syria, Egypt and the Maghreb. There are numerous common people...'. Also

Glueck disputes the identification of Tell al-Khulayfa with either Ezion Geber or Eilat.

[10] According to *The Hans Wehr Dictionary of Modern Arabic* (ed Cowan 1976, 626) 'aqaba is defined as a steep road or track, steep incline; pass mountain road.'

[11] It has even been suggested that 'Ayla is the location of one of the events described in the Quran where fishermen are accused of breaking the Sabbath (Q7: 163-6).

[12] In any case it seems likely that a bishop would have had considerable civic responsibilities by this date as elsewhere in Syria and North Africa.

in the ninth century (sometime around the year 860) the mountain pass near the town was widened to facilitate the passage of Muslim pilgrims. The work was undertaken by Fa'iq on behalf of Khumarawayh ibn Ahmad ibn Tulun (884-95) and allowed pilgrims to travel this part of the road mounted rather than on foot (Gill 1992, 313; Maqrizi, *Khitat* ed. Wiet, iii, 228-35).

Under the Fatimids the town continued to prosper as is indicated by al-Muqaddasi who gave the following description (circa 985)

'And Wayla is a city on a branch of the China Sea. Great in prosperity with its palms and fish, it is the port of Palestine, the storehouse of the Hijaz...' (al-Muqaddasi trans Miquel 231)

No doubt the prosperity was partly based on the pilgrim traffic which could result in great profits for the local merchants as in 1024 when according to al-Musabbihi 100,000 Khurrasani pilgrims passed through the town (Gill 1992, 582-3, al-Musabbihi *Akhbar Misr*, 34)

Muqaddasi also discussed Ayla's position between Egypt, Syria and the Hijaz stating;

'... in Wayla, there is a disagreement among the people of Syria, the Hijaz and Egypt, like in Abbadan, but I join it to Syria because its customs and measures are Syrian. It is the port of Palestine from which comes its imported goods' (al-Muqaddasi trans Miquel 231).

Nevertheless the isolated position of Aqaba made it vulnerable to attack particularly from local tribesmen. Thus in 981/2 it was the scene of a battle between the Fatimids and Bedouin where the Fatimids were decisively defeated (Gill 1992, 559). Other accounts indicate that this was not an isolated event; thus in 1025 the Egyptian pilgrims to Mecca could not continue because the town was subject to tribal attacks (Gill 1992, 391). In addition to these man made disasters there were also natural events such as earthquakes. The most damaging event was an earthquake on 18th March 1068 which destroyed the city, according to the contemporary Abu Ali Hassan b.Ahmad al-Banna who heard of the event while he was in Baghdad (Gil 1992, 602 no.60).

The historical information for the latter part of the eleventh and early twelfth century is scarce and confusing. Thus it is not known whether the area was under Fatimid or Seljuk control and the only available evidence is problematic (cf. Schick 1997, 77). For example a document dated 1134 purporting to come from the Fatimid caliph al-Hafiz orders the governor of Ayla to respect the rights of the monks of St.Catherine's Monastery in Sinai (Stern 1964, 46). The document may be genuine though it is also possible that it was forged by the monks to support their claims (as suggested by Schick 1997,77). Another piece of evidence suggesting Fatimid control of the city at this time is a coin dated 514 AH (1120-21 AD) published by Lavoix (1896, 161-2). However as Schick (1997, 305) point out this date is after Baldwin's raid on Aqaba and in any case 'the questionable reading of 'Aqaba as the mint should be rejected'.

It is generally assumed that the history of the town in the Crusader period is well known; thus Schick (1997, 78) states ' the historical information available about southern Jordan increases greatly with the arrival of the Crusaders'. However the presence of the Crusaders at 'Aqaba has been a matter of some dispute and confusion. A few main facts are well established and have been summarised by Pringle (2001). In 1116-17 Baldwin I King of Jerusalem (and formerly Count of Flanders) led an armed expedition to Ayla which then remained under indirect Frankish control until 1170 when it was captured by Saladin. The town was briefly recaptured by the Franks in 1182-3 under the leadership of the notorious Reynald de Châtillon, Lord of Karak, who attempted to establish the site as a Frankish naval base. These events have led scholars to suggest that a Crusader castle was established at Ayla from as early as 1116-17 (see also Ibn Jubayr trans Broadhurst 67). However, as Pringle points, out there is no evidence of a castle being established at the site before the reign of King Fulk (1131-43) . The Frankish presence at Ayla was terminated by Husam al-Din Lu'lu' who defeated Reynauld de Chatillion in 1183 (see archaeology below for possible location of castle).

By the late thirteenth century the town appears to have been greatly reduced in size. Abu al-Fida (1273-1332) states that in his time the castle by the shore was all that remained of the town, though he also notes that this was the residence of the Egyptian governor suggesting something more than a simple fortress. There was evidently still some settlement in the middle of the thirteenth century when the town was visited by Ibn Battuta (1304-77) who referred to it as 'Aqabat 'Ayla (trans Gibb 1958,159 n.14). There is very little historical information for the remainder of the Mamluk period with the exception of the early sixteenth century when it became established as a base for activities against the Portuguese in the Red Sea. According to the sixteenth century Egyptian historian Ibn Iyas the architect/builder (*al-mi'mar*) Khayr Bay al-'Ala'i was sent to 'Aqaba by Sultan Qansuh al-Ghawri where he built 'caravanserais (*khans*), warehouses (*hawasil*), and towers...and paved the road leading to the harbour'. The same person was also charged with finding suitable metal for casting cannon and sent stones containing copper ore (presumably from the vicinity of 'Aqaba) to the Sultan. Ibn Iyas also notes that the same Sultan established a Mamluk garrison at 'Aqaba which was to be relieved once a year (Ibn Iyas IV, 511-2 cited in Ayalon 1956,113,n. 18 and Glidden 1952,118). With the transfer to Ottoman rule after 1516 'Aqaba remained an important if dangerous point on the Egyptian pilgrimage route to Mecca. Thus al-Jaziri reports that pilgrims near 'Aqaba would suffer surprise attacks from Bedouin (Banu 'Atiyya) who would swim with their swords in the bay. In general the Bedouin were controlled with payments of

cash and cloth. Sometimes, however, payments were reduced which caused increased attacks which were severely dealt with by the Ottoman authorities. Thus in 1545 after a retaliatory raid against the Banu 'Atiyaa seventy of their women and children were imprisoned in 'Aqaba (Bakhit 1982, 224).

Archaeology[13]

Until the discovery of Islamic 'Ayla by Donald Whitcomb in 1986 very little was known about the historic period archaeology of the town (see **Figs. 30** and **31**)[14]. For example in 1967 Lancaster Harding wrote;

'Of the later towns there are no visible remains: they are hidden under the sand dunes and mounds and covered by various military and commercial installations. Occasionally some piece of evidence comes to light in the form of sherds or carved stones, and piecing all this together it is possible to say that it continued to be a moderately flourishing town up to the time of Islam.' (1967, 143-4)

The above statement has been proved to be partially true though of course the implication that the town ceased to flourish with the advent of Islam is neither corroborated by the historical sources cited above nor the archaeological evidence to be discussed below. Ironically it is the remains of the Byzantine and Roman period which have proved harder to locate and are only now beginning to be uncovered by the Roman 'Aqaba project.

Roman and Byzantine Period

The main Roman Byzantine site is located due North of the Early Islamic town though the full extent has yet to be determined. The geographer al-Muqaddisi noted these remains as early as the tenth century when in his description of the Islamic town he states 'The people call it Ayla, but the ruins of [real] Ayla are nearby'. These remains had mostly disappeared by the early twentieth century though a few stray finds such as the four Byzantine capitals stored in the Customs House in 1940 testified to the existence of the Roman and Byzantine city (Glidden *EI* AYLA, 783). Similarly Glueck's observation of 'a Byzantine church now buried under modern gardens along the shore' indicated that more may be hidden beneath the sand (Glueck 1934,10). More recently during the excavation of Islamic Ayla a fragmentary Latin inscription was found which appears to date from the time of Constantine and the time when the Tenth Legion Fretensis was transferred to Ailana from Jerusalem (Whitcomb 1988,23; MacAdam, H.I. 1989 : Whitcomb 1991, 130 Plate XI).

The first serious investigation of the Roman and Byzantine periods began with a survey of West 'Aqaba (i.e. the area between the remains of Islamic Ayla) carried out by John Meloy in 1990 which identified seventeen sites with Nabatean to Early Islamic material (Meloy 1991). This survey formed the basis for the continuing excavations carried out by the Roman 'Aqaba Project (Parker 1995, 1997 and 1999). The most impressive result of these excavations was the discovery of the city wall which was built in stone and dated to the early Byzantine period (Parker 1995, 522). The wall included three projecting rectangular towers and was traced for a distance of over 120 metres. In addition to the rectangular towers on the north side of the wall 'two elliptical mud brick towers connected by a mud brick wall...on stone foundations' were added in the sixth century (Parker 2000,5).

To the north of the wall there was a cemetery also of Late Roman to early Byzantine date with mud-brick vaulted tombs. To the south of the city wall there was a domestic area with occupation from the third to tenth centuries. Confirmation of the identity of the site was provided by a fragmentary inscription bearing the name AILA (Parker 1999). One of the most significant finds was a large mud-brick structure of two storeys which was overbuilt by the city wall in the late fourth or early fifth century. The excavators believe that the building was a church constructed in the late third or early fourth century AD. Although this is an extremely early date for a church the orientation and design of the building are consistent with an early church and are supported by the historical evidence which notes a bishop of 'Ayla in 325 AD (Parker 1995, 1997, 1999 and 2000).

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[13] Archaeological references to Ayla/ Aqaba Ahmar 1997; Avner 1996; Avner 1998; Avner and Magness 1998; Ayalon 1956; Bakhit 1982; Burton 1879,I, 240-1; De Meulemeester and Pringle 2001; Frank 1934; Gilat et al 1993; Gil 1992, 313,391,410,559, 582-3, 602; Harding 1967, 143-4; Holzer and Avner 2000; Laborde ????; Lavoix 1896, 161-2; Meloy 1991; Musil 1926, 81-7; Parker 1995; Parker 1997; Parker 2000; Practico 1993, 869-70; Pringle 2001; Rapuano 1994; Rothenberg 1972, 224-228; Schick 1995, 246-9; Schick 1997; Shaw and Rothenberg 2000; Stern 1964, 46; Tamari and Hashimshoni 1973; Woolley and Lawrence 1917, 128-30.

[14] One of the first modern European travellers to record his impressions of the town was Leon de Laborde who visited the site in 1828 followed twenty years later by Richard Burton (1879,I240-1). In the early twentieth century the town was visited by the Czech anthropologist Alois Musil (Musil 1926, 81-7) and a few years later by Wooley and Lawrence (1917, 128-30). The first serious archaeological excavations carried out by Glueck in the 1930's focused on Tell al-Khulayfa (Glueck 1993). However there had been no archaeological excavations or surveys in the town itself with the exception of the Mamluk castle/khan. However there was an awareness that earlier remains existed in the vicinity of the present town. For example Glidden (*EI* AYLA, 783) commented on the four Byzantine capitals seen in the customs house before 1940 which were said to have come from a church.

In 1986 an excavation by Whitcomb revealed the remains of a settlement dating to the early Islamic period. Subsequent excavations revealed a large walled settlement identified as the remains of early Islamic 'Ayla. These excavations continued into the early 1990's when a new project was directed by Tom Parker uncovered remains of the Roman and Byzantine period. In 2000 a team from Belgium and Cardiff began the archaeological investigation of the Mamluk fort/khan (Pringle 2001). In addition to the excavations and surveys in Jordan a series of excavations and surveys around the Israeli settlement of Eilat have revealed considerable evidence for the early Islamic period.

Early Islamic Period (7th-12th Centuries)

Early Islamic remains are found in a number of locations around the head of the Gulf of Aqaba (i.e. both in Jordan and Israel). The main site, is located on the sea front nearly 1 kilometre north of the Mamluk Khan/Fort and is now bisected by a Wadi.

While the investigation of Roman Ayla is still in progress the investigation of the early Islamic city has been more or less been completed. The excavation of the Islamic city began in 1986 and was substantially completed by 1994 (Khouri and Whitcomb 1988: Whitcomb 1990: Whitcomb 1991, 1994) although a single season was carried out in 2000 to investigate a specific problem (Parker 2000,5 and see below).

The remains uncovered by the excavations comprise a rectangular enclosure aligned NE-SW enclosing an area 120 x 160 metres with round corner towers and projecting semi-elliptical interval towers (**Fig. 31**). Four gateways lead to a central space where, in the earliest phase of the site, there was an arched pavilion resembling a classical tetrapylon. The stratigraphy and finds from the site indicate occupation starting before the Umayyad Period (probably just after the Muslim conquest Whitcomb 1995, 130) and continuing up to the early twelfth century[15].

In view of the early date proposed for the site (i.e. pre-Umayyad Islamic) the site represents the earliest known extant example of Muslim town planning. Specifically Islamic features of the site include parts of a monumental Kufic inscription found in blocks in front of the north-west gate (called *Bab al-Misr* by the excavator). Although not complete the fragments have been shown to be a verse from the Qur'an, *Ayat al-kursi* (II, 255). Although not *in situ* it is likely that the inscription was originally set above the gateway informing those arriving that this was part of the Muslim commonwealth (Whitcomb 1991, 126-7, Fig.3 and Pl.12 A). The other specifically Muslim feature is the congregational mosque (Area F) which occupies a significant proportion of the north-east quadrant of the walled area. The identity of this structure as a mosque was only confirmed in 1993 as the area had previously been referred to as the 'Large Enclosure' (Whitcomb 1995, 278, n.11). During the Abbasid period (750-1000) the mosque was built over the north-east axial street, though in earlier times it appears to have been smaller.

There is considerable evidence for change over the 450 years of occupation. For example the arched pavilion at the centre of the enclosure was built over in the 'late Abbasid/Fatimid period (950-1000 A.D.)' and a luxurious residential building complete with iwans. A central pool and frescos was built on the site (Whitcomb 1991, 126). Other buildings of the same period were built of mud brick and were less impressive thus Whitcomb (1991, 126) states 'Here the structures were entirely of mud brick, and the courtyards featured numerous *tabun*-s or ovens. The impression is one of growing impoverishment, perhaps a widening gap between rich and poor, under the Fatimids and just prior to the abandonment forced by the Crusaders.'

The second major concentration of Early Islamic material is in West 'Aqaba within the area covered by the Roman 'Aqaba project (**Fig. 30**). The evidence from these excavations indicates considerable continuity from the 2nd to the 3rd centuries, thus a recent report states; 'Substantial stone and mudbrick structures of the Umayyad period laid out along a street running north-east to southwest, were found under Abbasid domestic structures. The street follows the plan of the earlier Byzantine city....The deep Umayyad and Abbasid strata suggest that Byzantine Aila witnessed continued intensive occupation well into the Early Islamic period.' (Parker 1999, 513).

In addition to the excavated areas surveys have revealed several areas of activity dated to the Early Islamic period. Thus Meloy's survey found three early Islamic sites including the remains of a seventh century pottery kiln (M13) to the North of the Early Islamic city and to the east of the Roman Byzantine city (see also Wheatley 2001: 325-6 esp. Fig 26).

Another area where early Islamic material was recovered was beneath the late Mamluk fort approximately 1 kilometre south of the main early Islamic site. The remains were described by the excavators as follows 'The first trench...revealed an early wall, one metre wide, which ran at right angles below the north range [of the Mamluk fort]. Associated with it was ninth to eleventh century pottery similar to that recovered in 1999 (De Meulemeester and Pringle 2001).

Further finds of Early Islamic material have been made outside the immediate environs of the modern town of 'Aqaba, within the present day territory of Israel. The most significant group of remains is a large dispersed settlement or settlements located to the north of the modern town of Eilat and excavated between 1973 and

[15] The pre-Umayyad date, combined with the finding of the Latin inscription, have led some scholars to suggest that the remains are those of Diocletian's Legionary camp (see for example Knauf and Brooker 1988). This suggestion prompted a vigorous response from Whitcomb (1990:1995, 278 n.12) who was convinced that the site was an early *misr* (camp) on the model of those at Fustat, Basra, Kufa and Wasit. He conceded that the plan of the remains bore some similarity to legionary fortresses and that the towers at 'Aqaba were of hollow construction unlike the solid towers found at other similar Islamic sites, nevertheless he rejected a Roman attribution on the basis that no Roman levels were recorded beneath those of the Late Byzantine/Early Islamic layers. However Whitcomb was not able to provide a definitive rejection of the Roman camp hypothesis until 2000, when, as part of the Roman 'Aqaba project he made a deep sounding against the walls. The brief report on the sounding states;
'Once the wall was articulated, a pump was employed to permit excavation below the water table. Pottery from soil layers against the north face of the masonry foundation and from a soil layer extending underneath the foundations dated to the 7th century, confirming Whitcomb's date for the foundation of Early Islamic Ayla.' (Parker 2000, 5).

1993 (Rapuano 1994: Avner 1996; Avner 1998). The buildings comprises small rooms opening off rectangular courtyards. The rooms had mud brick walls resting on foundations or rubble stones laid in rough courses and set in mud mortar. The excavators suggest the roofs were made of branches or tent fabric. The floors of the rooms were of beaten earth and in some cases there two or three layers suggesting continued use over a long period. In addition to the houses a number of stone enclosures were uncovered which the excavators interpreted to be the base of tents. Burials including grave goods dated to the Abbasid period were found under the floors of some of the rooms. In addition to the domestic structures there were a number of installations including pebble lined pits, clay ovens and in one case a clay oven was set into a pebble platform containing copper slag. Finds from the site included coarse cream-coloured Mahesh ware, dated by Whitcomb (1989) to the late Umayyad and early Abbasid period, soft-stone vessels (chlorite schist), lead-glazed relief ware and copper slags. As might be expected environmental sampling recovered plentiful fish remains from both coastal waters and the open sea. A series of six C^{14} samples were taken most of which gave calendar dates within the range of 600 – 768 AD though one gave a later date (see Medieval section below). Although this site is located more than five kilometres from the main Islamic settlement of Ayla the lack of any other major settlements in the area suggests that it was part of the same urban region.

Medieval Period (1100-1600)

Archaeological evidence for the medieval period is more scanty and more widely dispersed than for the early Islamic period. The principal remains are the Mamluk khan/fort located next to the shore approximately one kilometre south of the site of Early Islamic Ayla. The date of this building is as problematic, as is its function. Two inscriptions within the entrance give two dates, the first and largest inscription refers to its construction during the reign of the Mamluk Sultan Qansuh al-Ghawri (i.e. 1500-1516)(Glidden 1952). The second inscription records the reconstruction of the castle by Sultan Murad III (1574-95 AD) (Khouri and Whitcomb 1988). The architecture of the building indicates several subsequent re-buildings though there is little to indicate any structures earlier than the present sixteenth century building with the exception of the early Islamic wall discovered in recent excavations (see above). The area in the vicinity of the castle was the centre of the settlement until the mid- twentieth century and it seems reasonable to suggest that this was the location of the post Crusader town although this has yet to be confirmed by archaeology.

Other evidence of Mamluk occupation in the vicinity includes a Mamluk campsite five kilometres west of Eilat (Holzer and Avner 2000), at least part of the Early Islamic village (Eilat/Elot) north of modern Eilat appears to have been re-used in the Mamluk/early Ottoman period according to finds (e.g. a fourteenth century bracelet) and a C^{14} date of 1514-1654 AD sealed between floors (Avner 1998). More prestigious remains include the rock cut pass 'Aqabat al 'Urqub dated to the reign of Sultan Qansuh al-Ghawri (Tamari and Hashimshoni 1973) and the fortress on Jazirat al-Fara'un which should probably be dated to the twelfth century (De Meulemeester and Pringle 2001).

Conclusion

A few observations and questions emerge from this review of the archaeology and history of 'Aqaba. The first and most notable feature is that the Early Islamic period appears to represent the most intensive and extensive period of settlement before modern times. Although, to some extent, this is reflected in the historical literature neither the nature nor the extent of early Islamic settlement was known before the archaeological work of the last fifteen years. The results of excavation and survey work show that there was intensive settlement on the western side of the modern town of 'Aqaba and dispersed settlement in the neighbouring region of Eilat (see Avner and Magness 1998 for a discussion of the archaeology of the 'Aqaba/Ayla region in the first centuries of Islam).

The second observation is that medieval occupation (1100-1600) including the period of Crusader occupation is not well documented in the archaeological record. The remains that are known are diffused over a wide area and represented by specific monuments or sites (eg. the Mamluk Fortified Khan, the rock cut pass or the castle on Jazirat Fara'un). To some extent this situation is reflected in the historical sources which give little information about the medieval period and generally state that the town was in a dilapidated condition thus; Abu al-Fida (1273-1332) state that in his time nothing was left of the town except the stronghold near the shore (*Twakim* 86-7 cited in Glidden, 'Ayla 784). Nevertheless the lack of identifiable Crusader remains and the small quantities of information about the late Mamluk period (i.e. late fifteenth and early sixteenth century) suggest that some of the archaeology has yet to be discovered or has been destroyed by modern development in both Eilat and 'Aqaba. For instance it seem likely that the Mamluk/fort/khan was a focus for settlement in the late Mamluk period though no archaeological work has been carried out in the vicinity. At this point it is worth bearing in mind Donald Whitcomb's observation about Early Islamic Ayla where he states 'the current excavations have revealed city walls, now cleared over 4 metres deep and 2m wide, which had left *absolutely no trace on the surface*' (Whitcomb 1995, 278, 12).

A number of other archaeological problems have still to be resolved, thus the location of the legionary fortress of the Tenth Legion Fretensis has still to be located (the walls found by the Roman Aqaba project are not at present regarded as those of a legionary fortress but rather those of the city cf. Parker 2000).

Table 5 'Aqaba/Ayla Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Area/ Population	A (> 10 ha.)	A(> 10 ha.)	?	?	?
Fortifications	A	A	H	A	A
Religious buildings	A	A	?	?	?
Secular public buildings	?	A	?	?	?
Commercial buildings	?	A	?	?	?
Industrial activity	?	A	?	A	?

A= Archaeological Evidence, Historical Evidence

Another question of more general relevance is whether the remains excavated by Whitcomb should be classed as a town or a Muslim Arab camp (*misr*) attached to a pre-existing town or both. Certainly the size of the walled enclosure (Early Islamic Ayla) excavated by Whitcomb is quite small, thus it is comparable in size to the Umayyad desert palace of Mshatta and less than half the size of 'Anjar however the layout of the interior appears to be more like 'Anjar.

A final question concerns the economy of Aqaba/ Ayla. Clearly the town derived increased importance from its role on the Egyptian Hajj/ pilgrimage route. In addition the remains at Elat-Elot indicate that copper production was taking place in the Early Islamic and in the Mamluk periods (see also discussion of Mamluk copper and iron working in the area in Rothenberg 1972, 224-228). There has also been a suggestion that the area was used for Gold mining although this remains to be substantiated (see for example Gilat et al 1993 and Ahmar 1997 which propose a gold production centre in the area and Shaw and Rothenberg 2000 who are extremely sceptical of such claims).

Oboda/Avdat

This site is located in the central Negev 63 km. south of Beersheba (Palestine Grid 1278 0228) (**Fig. 29**). It stands on an elevated site overlooking Wadi al-Hammam and comprises a large fortified settlement with a Roman military camp to the north-east. The main settlement stands on the edge of an escarpment overlooking the Wadi to the south. The site owes its existence to its location on the main caravan route from Ayla to Gaza.

The focus of most research at Avdat has been to obtain an understanding of the site in the Nabatean period (see for example Negev 1993, 1163 where he writes of the 'quest for the Nabatean sacred compound'). The major development of the early Roman period was the construction of a residential quarter to the south-east of the Nabatean acropolis. In 363 AD the town was struck by an earthquake that caused considerable damage to the acropolis and probably ended the occupation of the residential quarter. Following the earthquake the acropolis was repaired and remodelled. A fortress was established in the north-east and the south-western part was developed as an ecclesiastical complex with two churches.

According to the excavator the North Church with one apse was built between the mid fourth and mid fifth century whilst the south church with three apses was built in 450 AD. The South church contains a number of burials dated by inscription. The earliest burial is dated to 541 and the latest is dated to 618. According to Negev 'the South Church… was set on fire apparently in 636, during the Arab conquest. Half burned wooden beams of the roof were found on the floor' (Negev 1993e, 1163). Following the destruction there was some re-building with small rooms built on the remains of the colonnade. The North Church was also destroyed by fire with the charred remains of beams overlying the chancel. After the fire the area was used as a sheepfold (Negev 1993e, 1163).The fortress also contained a church which was apparently built after the destruction of the other churches as there was no trace of a fire and it incorporated re-used stones. The implication is that it may belong to the early Islamic period or that the destruction predates the Arab conquests..

A series of caves cut into the escarpment beneath the acropolis are interpreted by Negev as a Byzantine residential area though they could equally have been housing for pilgrims of coenobitic monks. One of the caves contains an un-deciphered Kufic inscription which demonstrates an early Islamic presence at the site. Below the acropolis, near Wadi Hammam, there is a bathhouse which has also been dated to the Byzantine period (Negev 1993e). Unfortunately no details are given for dating the bath house although its design is similar to the Umayyad bath houses at Qusayr Amra and Hammam al-Sarah and it is tempting to date it to the same period.

Conclusion

Despite the large amount of archaeological field-work which has taken place at Avdat and the considerable number of publications (for a bibliography see Negev 1997) the archaeology of the site is still not well known

Table 6 Oboda/Avdat Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Area/ population	A (5 ha.)				
Fortifications	A				
Religious buildings	A				
Secular public buildings	A				
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

so that any conclusions must be tentative (cf Graf 2000). There are considerable differences of opinion concerning the destruction of Avdat in the sixth century. According to Gutwein (1981) the city was sacked by Persian forces during an invasion of Egypt sometime between AD 614 and AD 629. Negev (1993e) attributes the destruction to the Muslim conquests (see above South Church) whilst Schick (1995, 254-5) suggests that destruction was a result of the 633 AD earthquake. On the basis of the available information it is not possible to choose between these suggestions though in general it is clear that the settlement did not survive much beyond the early seventh century. In any case it is questionable whether the site should be considered as urban, even in the Byzantine period

Beersheba (Appendix 1, Table 1)

This large ancient site is located in the northern Negev approximately equidistant between the Mediterranean and the Dead Sea (Palestine Grid 130 072)[16]. The modern city was established by the Ottoman Turks in 1900 as an administrative and military centre to safeguard the area from invasion from Egypt. Since the First World War the city has rapidly developed so that it now covers an area of approximately 25 square kilometres (Kedar 1999, 46-9). The ancient (pre-Roman) settlement was located at Tel Beersheba located approximately five kilometres east of the centre of the modern city (see below). The late Roman, Byzantine and early Islamic city was located near the core of the modern city established by the Ottomans and it is probable that the earlier remains were re-used in the Ottoman constructions.

Historical references clearly indicate that Beersheba was a town of some importance in the late Roman and Byzantine periods; thus the *Notitia Dignitatum* states that a cohort of Equites Dalmatae Illyricani were housed here and in the fourth century. Eusebius (*Onomasticon,* 227) described Beersheba as headquarters of a military unit. A number of imperial tax decrees and official tombstones found in Beersheba (Alt 1921, 4-13) and elsewhere confirm the importance of the place (though Beersheba itself is not mentioned) as does the depiction of the town on the sixth century Madaba map (Avi-Yonah 1954: Donner 1992, 70)[17]. Compared with the considerable epigraphic and documentary evidence for Beersheba before the Arab conquest there is very little mention of the city in sources from the Islamic period although whe[n] it is mentioned it appears to be the private estate of 'Amr ibn al-'As[18].

There have been more than twenty registered archaeological excavations within the municipality o[f] Beersheba that have recovered remains of the Roma[n] period and later (see **Figs.32** and **33**). The excavation[s] may be divided into four groups: i) those carried out o[n] Tel Beersheba, ii) those carried out to the north of th[e] modern city iii) those carried out near the City Centre an[d] within the Ottoman 'Old City' and iv) excavations to th[e] south and west of the 'Old City'.

1. Tel Beersheba

The remains on Tel Beersheba (**134 072**) belon[g] principally to the Iron Age and earlier though there a[re] also significant remains from the Roman and Byzantin[e] periods including a fort on the summit and th[e] foundations of a large church lower down to the east. Th[e] date of the fort is problematic (Fritz 1973; Kennedy an[d] Riley 1990) though the other remains have been dated [to] the mid-sixth century on the basis of coins an[d] inscriptions (Dauphin 1998, 960). Between the eighth an[d]

[16] Abel 1903: Avi Yonah 1954: Cohen 1968 ; Cohen 1972: Dauphin 1998, 959-60: Ein-Gedy and Masawah 1999: Fabian 1995:Fabian & Rabin 1996: Fritz 1973: Gihon 1969:Gilead et al 1993: Govrin 1990 :Govrin 1991: Herzog 1993, 173: Ilan 1980: Israeli 1967: Israeli 1968: Katz 1993: Katz and May 1998 : Kedar 1999, 46-9 : Kennedy and Riley 1990: Negev 1993 : Negev 1994 ; Ovadiah and Gomez de Silva 1981, 207-8 : Shimron-Vadaei 1999 : Nahshoni et al 1993: Ustinova and Nahshoni 1994:Ustinova and Figueras 1996: Varga 2000.

[17] There is, however, no evidence that Beersheba was headquarters [of] the Roman limes or that it had a bishop in the Byzantine period desp[ite] its evident importance (see Figureas 1994, 287).

[18] Al-Bakri (*Kitab al-masalik wa al-mamalik* ed. de Slane, II, 7[...]) writing in the eleventh century describes Bir al-Saba as 'the villag[e] [of] 'Amr ibn al-'As of Palestine, in Syria. There live some of his pare[nts] The thirteenth century writer Yaqut (*Mu'jam al-Udaba* ed. Margolio[uth] III, 34) describes it as follows ' Al-Saba is a region in Pales[tine] between Bayt al-Maqdis and al-Karak. There are seven wells, f[rom] which the site bears its name. This is the property of 'Amr ibn al-'[As]. There he lived, after his retirement from public life'.

the ninth centuries the fort was re-used as a way-station before being finally abandoned (Herzog 1993, 173).

2. North of the City.

The area to the north of the modern city has been the location of a number of excavations carried out in advance of development work. As early as 1968 Cohen excavated three Areas in Shikun Dalet (No.1, **1315 0741**), a suburb in the north part of the modern city. In Area A eight tombs were discovered; in area B there were two structures one with a square room with pottery on the floor and in Area C there was a house with six rooms one of which contained a pottery kiln (Cohen 1968). Three years later in 1971 Cohen excavated an area five hundred metres further north (No.2, **1313 0746**) which revealed a two room structure with walls built of rubble stone. One of the rooms contained a furnace and pottery dated to the sixth and seventh centuries (Cohen 1972, 41-42).

More recently, during the 1990s, excavations have been carried out to the north-east of the modern city in advance of development work. The largest group of excavations were carried out from February to May 1991 in the north east of modern Beersheba in an area known as Ramot Nof (the area is also referred to as the Nahal Koveshim because of the wadi that runs approximately East-West along the northern edge of the city). The excavation was divided into eight areas (A-G) extending over more than a kilometre. Although the majority of finds were from the Byzantine/early Islamic period, twentieth-century ruins and Chalcolithic remains were also excavated. The remains attributed to the Byzantine period may be summarised as follows; in Area B (No.3 **1312 0762**) a large building (7.0 x 7.5m) was uncovered with walls up to two courses high and a roof supported by a stone arch, in Area D (No.4, **1315 0752**) a large courtyard building (17.5 x 26.0m) was uncovered and in Area E (No.5, **1310 0757**) another courtyard building was exposed. The buildings were dated to the sixth and seventh centuries on the basis of 'pottery vessels characteristic of the Byzantine period' though it should also be pointed out that significant numbers of early Islamic finds were also recorded (Nahshoni et al 1993; Ustinova and Nahshoni 1994).

Another excavation to the north of the city was carried out on the University campus (No.6, **1318 0751**) from December 1990 to February 1991. The excavation revealed eight buildings of similar design each comprising a main room, a smaller room and a courtyard. The buildings were mostly built of rubble of various sizes with stone pillars and marble also utilised. In each case the main room had a raised floor with thicker walls than the other rooms. Some evidence was uncovered for two stages of use with temporary structures in the first phase becoming more permanent in the second phase. Installations included built silos and large (donkey drawn) millstones. Two bell shaped cisterns were also investigated. They were dug into the soil and lined with rubble stones and coated with hydraulic plaster. In addition to the buildings twelve cist graves (some containing more than one individual) were discovered aligned east-west. All of the finds are attributed to the early Islamic period though the nature of the finds including Greek ostraca and the orientation of the burials have led the excavators to include that the inhabitants were Christian (Nimrod Negev 1993).

The third group of excavations to the north of the town were carried out in an area called Ramot B (No.7, **1322 0753**) located approximately half a kilometre west of the University Campus excavations. The area had previously been surveyed by Zvi Ilan (1980) who identified four structures and a rock-cut cistern. The excavations concentrated on one of these structures, which comprised a small room (1.05 x 1.20 m) attached to a larger room. Finds from within the rooms and in the immediate vicinity comprised pottery from the late Byzantine period. The excavators interpreted these rooms as part of a small farmstead. To the north west of these rooms a mound of stones was excavated that proved to be rubble from a collapsed round structure (d. 3.14m) made of rubble stone and mud brick. This structure was identified as a watchtower or silo and was also dated to the late Byzantine period (Katz and May 1998).

3. The City Centre

The area in the immediate vicinity of the Ottoman 'Old City' has always been regarded as the centre of the Byzantine and Roman town. Re-used stones and architectural fragments found in the houses of the Ottoman town suggest that the earlier ruins were used a quarry (Dauphin 1998, 959). As early as 1903 Abel produced a map of the remains of the town that covered a large area (estimated by Fabian 1995, 239 as 100-150 ha) with a circumference of more than three kilometres. The remains indicated on the map include churches, a bathhouse, cisterns and cemeteries.

One of these churches was re-discovered in 1948 and excavated by Y. Israeli in 1967 (Israeli 1968, 415-6: Ovadiah and Gomez de Silva 1981, 207-8). The church was located a few hundred metres to the south-west of the civic centre (No.8, **130 072**) and until recently included some standing remains . It (15 x 24m) had a stone and marble floor and three apses. At least two stages of construction were discerned and outside, to the south, there were rooms, one of which had a wall mosaic. Finds from the site included Byzantine ceramics and Umayyad coins indicating a continued Christian presence after the Arab conquest (Israeli 1967; Israeli 1968). Similarly the bath house, which had been noted on Abel's 1903 plan, was re-discovered in the 1990's though the upper part had been largely destroyed by development work in the 1950's (No.9, **1304 0717**). The surviving parts of the building, including a hypocaust, were found in 1992 when they were examined by Nimrod Negev after that had been damaged during construction work. Negev dated the structure to the Byzantine or early Islamic period on the basis of ceramic finds (N. Negev 1994).

Although the location of some of the principal components of the town were known from Abel's map, the location of the military headquarters mentioned in historical references (Notitia Dignitatum, Eusebius *Onomastikon* 227) was unknown. In the sixth-century Madaba map Beersheba is depicted as a rectangular camp with a building in the centre (Avi Yonah 1954). Recently this building has been identified from a 1918 German aerial photograph (No.10, **1303 0721**) though most of the area is currently beneath modern buildings (Fabian 1995). In 1996 excavations were carried out in part of this area in advance of development work on the site. The excavations revealed the remains of at least three structures, which appeared to be aligned with the walls of the camp known from the aerial photograph. The buildings were within the rectangular enclosure and were interpreted as barracks by the excavators. Finds from the excavations (including coins and pottery) dated the structures to fourth and fifth centuries AD though one large installation (Area B 2.5 x 3.5m) appears to be of a post-Byzantine date (Ein-Gedy and Masawah 1999).

Other excavations in the area of the 'Old City' revealed evidence for extensive occupation in the Byzantine and early Islamic periods. For example, Israeli (1967, 42-43) excavated three subterranean rooms one of which had a white mosaic with an inscription commemorating the reconstruction of the building (No.11, **1300 0715**). Nearby in 1968 R.Cohen (1968, 130) excavated a complex of seven rooms one of which had a mosaic pavement dated to the sixth century whilst another had a pottery kiln (Cohen 1968). In 1986 a salvage excavation was carried out to retrieve a mosaic pavement that had been found in the area of the 'Old Bedouin Market' during a survey of Byzantine remains (No. 12, **1306 0719**). The mosaic was located within an asymmetrical structure (7.25 x 8.5m) that was interpreted as the atrium of a mansion. Finds from the site included marble slabs and bowls pottery dating to the late Byzantine and early Islamic period (Y. Govrin 1990). A few years later, in 1997, an excavation in the new Bedouin market (No.13, **1308 0717**) a 100 metres to the south-east of the old market recovered ceramics of the late Byzantine and early Islamic period (Shimron-Vadaei 1999).

In addition to the structures described above a number of burials were discovered in the vicinity of the Civic Centre (No.14, **1295 0712**) during development works in the area (Varga 2000). Excavations revealed twenty-six cist tombs dated to the Byzantine period on the basis of finds from the burials. According to the excavator these tombs were part of a larger cemetery which occupied this area in the Byzantine and early Islamic period . Further burials were discovered to the east of the city centre in the modern Industrial zone (No.15, **1318 0725**). Sixty cist tombs were found lying beneath the foundations of two large structures (industrial?) dated to the fifth century AD. Near by a large (20 x 10m) stone? pavement was discovered (Cohen 1968, 130).

Further north, next to the Eilat road (No. 16, **1304 0724**) Govrin located another cemetery which he dated to the Late Roman and early Byzantine period (Govrin 1991). In the same season Govrin also excavated some structures and installations (evidence of industrial activity) nearby (No.17, **1307** 1722). Part of the cemetery discovered by Govrin was later built over at the end of the Byzantine or early Islamic period. The plan of the Byzantine period remains was not clearly established though there appears to have been a structure with at least two rooms and a courtyard (No.18, **1318 0725**). The Islamic period building consisted of two phases, the first dated from the mid seventh-early eighth century whilst the second phase was dated to the mid-eighth century. The limited size of the excavation meant that only part of the building was excavated which comprised several rooms around a courtyard (Fabian & Rabin 1996).

4. South and West of the Modern Town.

Excavations to the south and west of the 'Old City' were conducted at Nahal Beqa' and Bir Abu Matar (Horvat Matar). The Nahal Beqa site is located approximately one kilometre south of the civic centre (No.19, **1302 0705**) and was excavated in 1991 revealing a small room with entrance passage. The foundations were built of medium sized rubble stones whilst the upper part, of which only one course survives. comprised large flint blocks. There were also two ashlar blocks incorporated into the building which were interpreted as the base of a pier. Finds included pottery and glass of the Late Byzantine and early Islamic period. The absence of water in the immediate vicinity led the excavators to suggest that the building functioned 'as a watchman's booth, rather than as a farm' (Katz 1993).

The excavations at Bir Abu Matar (No.20, **1284 0714**) revealed a much larger building of at least two periods. In the first period dated to the late sixth and early seventh centuries there was a monumental building with flagstones floors and walls covered with mosaics or plastered and painted. The building included re-used stone slabs one of which had belonged to a tomb and was dated by inscription to the year 537 AD (Ustinova & Figueras 1996). It is suggested by the excavators that the building may overlie some earlier building of the Byzantine period, possibly a church. In the late seventh century a second building was erected on top of the earlier Byzantine structure. The later building had walls preserved to a height of half a metre and was built out of medium sized wadi boulders. Finds included pottery characterised as late Byzantine and Khirbet al-Mafjar type (Gilead et al 1993).

Conclusion

A few conclusions are possible based on the information provided by the excavations. Firstly the centre of the Byzantine city appears to be located beneath the town established by the Ottomans in the first part of the twentieth century. The centre of the city comprised a

Table 7. Beersheba Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (100-150 ha.)	A (100-150 ha.)			
Fortifications	A				
Religious buildings	A (churches)	A (churches)			
Secular public buildings	A (bathhouse)	A (bathhouse)			
Commercial buildings	A	A			
Industrial activity	A	A			

A= Archaeological Evidence, H= Historical

number of elements including the army camp, the church, the bathhouse and the urban mansion with mosaic floors. No traces of a town wall have been discovered and the boundaries of the town are indicated by cemeteries and industrial areas represented by pottery kilns. Beyond the immediate outskirts of the city there were a number of buildings which have been interpreted as farmsteads though the presence of churches at Tel Beersheba and at Bir Abu Matar indicate that these may have been suburbs rather than isolated rural settlements.

The second consideration is the chronology represented by the excavations. The majority of excavations yielded finds datable to the late Byzantine period whilst early Byzantine and Roman period remains were more rare. It is also seems likely that there was some expansion of the site in the late Byzantine and early Islamic period with structures built over earlier cemeteries (e.g. Nos.15 & 16 on map)

Many of the Byzantine period sites also contain evidence of continuity into the Islamic period with no clear break, indeed in many cases the excavators admit that they have no way of distinguishing between early Islamic and late Byzantine. This evidence for continuity is seen equally in the high-prestige buildings of the city centre (bath house, urban mansion) and in the 'farms' on the periphery. In spite of this evidence for the Islamic period there is no evidence for the adoption of the Muslim religion and in some cases the continuity of Christianity is evident (e.g. No.6 on map).

Elusa/Khalasa

This site is located in the northern Negev approximately 20km. south-west of Beersheba and 10km north-east of Rehovot (Palestine Grid 117 056)[19]. The ruins of the town lie within a bend of Wadi Gaza (Nahal Besor) and comprise a main street running south- north at least two churches and a theatre. The area occupied by the city is approximately 48 ha. though the nature of the remains indicate a fairly dispersed settlement. There is no remains of a city wall, which appears to be confirmed by the depiction of the city on the Madaba map and the towers described by A. Negev (1993b, 380).

The first excavations of the site were carried out in the 1930's by the Colt expedition though the results were never published in detail (Colt 1936, 216-20). In 1979 and 1980 further excavations were carried out by A. Negev (for full bibliography see Negev 1993b)[20].

The existence of the city during the Nabatean period is confirmed by the discovery of an inscription referring to King Aretas I (c. 168 BC). During this time Elusa was a transit settlement between Petra and Gaza. During the Roman and Byzantine periods the city increased in importance and became a centre of rhetoric (Mayerson 1983, 248). In the fourth and fifth centuries AD there are references to pagan idol worshippers and Christians living in the city. The establishment of Christianity appears to have been gradual, thus the first explicitly Christian tombstone is dated 519 AD although there had been bishops of Elusa since at least AD 431 (Council of Ephesus). In AD 530 Elusa is described as the third stop on a pilgrimage route from Jerusalem. A few decades later the site is described as being 'at the head of the desert which extends to Sinai'. According to Mayerson (1973, 253) this statement suggests that the city was in decline at this time and was being invaded by shifting sands.

During the fifth century Elusa was capital of Palaestina Salutaris. After the provincial re-organization that placed it in Palaestrina Tertia the city retained a pre-eminent position until Petra re-established itself as provincial capital (Dan 1982). Whatever its administrative satus *vis a vis* Petra, Elusa remained an important administrative

[19] The earliest reference to the site is in Genesis (16:7) where it is referred to as Halusa. The site is also mentioned by Ptolemy (*Geography* V, 16, 10) who refers to it as one of the settlements west of the Jordan river. The city is depicted in the Madaba map as a settlement defended by towers enclosing buildings with red roofs.

[20] Elusa was first discovered and identified by Robinson in 1838 (1841, 201-2) and in 1897 it was visited by Musil (1907,2, 202-3). In the early twentieth century the site was investigated by a team from the École Biblique in Jerusalem which concentrated on the recording of inscriptions (Jaussen et al 1905) which were subsequently published in more detail by Alt (1921, 26-31). The first plan of the site was made by Woolley and Lawrence (1917, 30-31, 108-11 and 138-143) followed a few years later by Wiegand (1920).

Table 8. Elusa/Khalasa Summary

	Byzantine	Umayyad	Abbasid-Fatimid	Mamluk	Ottoman
Walls					
Size	A 35 ha.				
Admin Status	H	H			
Bathhouse					
Mosque/church	A 4				
Market Place					
Industry					

A= Archaeological Evidence, H= Historical Evidence

centre throughout the Byzantine period. This is demonstrated in the Nessana Papyri which refer to the city variously as 'capital of the region of Nessana' (Nessana Papyri Nos. 14-30) and 'capital of the district' Nessana Papyri No. 46). Despite its administrative status there is some indication that the size of the settlement may have been declining or at least stagnating in the sixth century. For example a mid-sixth century document (Nessana Papyri No 39) describes the military payments (*annona militaris*) for various sites in the region and describes Elusa as paying 792 *solidi* (approximately half the amount paid by other settlements such as Nessana, Oboda and Mampsis). A. Negev (1993b, 380) interprets this document to imply that Elusa needed less money for defence because it was already well protected though a more likely explanation is that the size of the settlement was less.

Whatever the actual condition of Elusa at the end of the Byzantine period it appears to have retained its administrative status into the Muslim period, thus in seventh century documents it is described as a district in the Province of Gaza (Nessana Papyri Nos. 60-70).

The archaeological evidence for the continuation of the city into the Islamic period is scarce. There are, for example, no Greek inscriptions from the period after 600 AD (Alt 1921, 29, No.60) and there are no reports of Arabic inscriptions from the site. Colt's expedition reported pottery from the Nabatean to the early Islamic period though Negev does not mention any post Byzantine ceramics. The only indication of continued activity after the Muslim conquest given by Negev is the statement that one of the churches was '...stripped of its marble revetment and columns in the early Arab period probably not much later than 700 CE [AD]' (Negev 1993c). However Negev presents no evidence to substantiate the date for this event.

Apparently the settlement was no longer thriving in the seventh century and there is no evidence of any occupation after the seventh century. Despite this Elusa continues to be referred to in official documents suggesting that the administrative status was very conservative. Confirmation for the continued administrative existence of Elusa comes from a fifteenth century Arabic document that refers to the territory of Khalus (Negev 1993b, 379).

Mampsis / Kurnub

This well-preserved ruined settlement is located on an elevated site 46 km south-east of Beersheba (Palestine Grid 156 046). The town was enclosed within a wall and is bordered on one side by the cliffs overlooking Wadi Kurnub (Nahal Mamshit). The remains enclosed by the wall have an irregular shape (approximately 200 x 140 m) and include at least two churches and a bathhouse.

The site is mentioned by Ptolemy (*Geography* V, 16, 100), in the sixth century Beersheba tax edict (Alt 1921,4-13) and by Eusebius *Onomasticon* (8:8). On the Madaba map Mampsis is depicted as a gateway flanked by two towers with red tiled roofs behind (Donner 1992, 69 No. 93).

There appears to have been continuous occupation of the site from the Nabatean to late Byzantine period with individual houses in continuous occupation. There was some difficulty dating the buildings and coins appear to have been the main method of assessing the periods of occupation.

According Negev (1993d) the city wall was built in the late Roman period though Appelbaum attributes it to the very late Byzantine period (Appelbaum 1956) which seems a more likely date in view of Negev's tendency to date features at the site earlier than most scholars would accept (cf Graf 2000). Neither of the two churches that have been investigated have been precisely dated though the East church is believed to have been built before 427 AD and the West Church was built at some time in the late fourth century. The east church contained Arabic graffiti and traces of occupation from the early Islamic period. According to Negev the church may have been converted into a mosque during this period though no evidence is given for this. A single burial in the north aisle is assumed to be the body of a Muslim though Schick (1995) rightly disputes this conclusion.

According to Negev the West Church 'was destroyed by a violent conflagration; parts of wooden beams and roof tiles were found in the debris, together with stone and marble fragments' (Negev 1993d, 891). One room in the south-east of the city appears to have been used as a forge in the Early Islamic period (Negev 1993d, 887) though there is no reported Islamic period occupation elsewhere on the site.

Table 9. Mampsis / Kurnub Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Area/ population	A (c. 4 ha.)	A (c. 4 ha.)			
Fortifications	A	A?			
Religious buildings	A (2 churches)	A?			
Secular public buildings	A (bathhouse)	A?			
Commercial buildings	A	A?			
Industrial activity	A	A			

A= Archaeological Evidence, H= Historical Evidence

Table 10. Nessana/'Auja Haffir Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Area/ population	A (15-18 ha.) H (1500)	A (15-18 ha.) H (1500)			
Fortifications	A	A			
Religious buildings	A (2 churches)	A (2 churches)			
Secular public buildings					
Commercial buildings					
Industrial activity					

A= Archaeological Evidence H= Historical evidence

According to Negev (1993d, 893) the town had already been deserted before 636 because there were no coins from later than the mid-sixth century. However the same author also enigmatically states that 'Kurnub was temporarily occupied by the Arabs following the conquest'. Unfortunately Negev gives little evidence for the 'Arab' occupation of the site and no pottery has been published. Negev (1993d) argued that the desertion of the site before AD 636 was the result of a Bedouin raid though Schick (1995, 402) suggests that it could also have been an earthquake. More recently Magness (2000) questioned the date of the abandonment of the town based on a re-examination of the pottery suggested that it was inhabited in the early Islamic period.

Conclusion

In view of the fact that none of the evidence for the 'Arab' period has been published it is not possible to give a definite date for the abandonment of the site though Magness' research indicates some continuity of occupation (Magness 2000). In any case the small size of the site suggests that it should not be considered as a town even though it most other features one would expect in an urban settlement.

Nessana/'Auja Haffir

Large dispersed settlement in the north-west Negev approximately eighty kilometres south-west of Beersheba (Palestine Grid 0970 0318). The site stands next to the Wadi Hafrir and comprises a town based around an elevated citadel (**Plates 9-10**). There are no historical references to the site before the Byzantine period though there is considerable archaeological evidence that the site was first developed by the Nabateans as a border post in the third century BC. Like other Negev towns the economy of the settlement depended on its position on a trade route and its function as a centre for local agriculture (cf Mayerson 1960) though it also served a military and administrative function especially after the decline of the older provincial centre of Elusa.

Nessana came to the attention of scholars later than other urban sites. The first plan of the site was made by Alois Musil in 1902 (1907:88-9). Soon afterwards the Ottomans developed the site as the centre of a *qaim maqamlik*. In 1908 the Turks built a military headquarters and hospital on the site that was used a base for raids on the Suez canal. The first archaeological excavations were carried out during the British Mandate by the Colt expedition (1935-7). The most important discovery of the excavation was the Papyri dating from the early sixth century (512) to the late seventh century (689).

The remains of the town include three churches a fort, streets and open spaces enclosed within a defensive wall. The fort is a large building with projecting square towers at either end of the south wall and at regular intervals along the east wall. There is a vaulted entrance in the

middle of the south wall that leads into a rectangular courtyard (85m x 35m) surrounded by rooms. The North Church is located on the northern slope of the acropolis and is separate from the fort. The church was dedicated to Saints Sergius and Bacchus and formed part of a monastery. It was founded some time before 464 AD according to a Greek funerary inscription and enlarged in 601-2 AD according to an inscription on one of the capitals. The church contained a number of tombstones, the earliest dated to 605 and the latest to 630. The remains of many of the furnishings including marble indicate that the church was not robbed before it collapsed. There was considerable evidence for later occupation of the complex thus lamps dated to the Abbasid period were found sealed beneath the floor in a number of places (Room 1, Room 10, Room 32, the entrance hall and other places). There was also evidence for later use of the site with blocked doors and rough walls suggesting secondary use. The majority of coins were from the mid-seventh century or earlier though ten undated coins were from the period 696-750. There is documentary evidence from one of the papyri that the church was in use in 685 AD (Kraemer, 156-60 No.56). To the north of the church there was a small chapel that was associated with a number of chambers and has been interpreted as a *coenobion*.

The church of St Mary Theotokos (the South Church) stands on a low crest to the south of the acropolis. It was built in 602 AD according to an inscription on one of the capitals. Recent excavations revealed two residential complexes associated with this church. The church was connected to the fort by a hastily built enclosure wall dating from the period after the construction of the church.

The acropolis was connected to the town by an enclosure wall that ran down the side of the hill and followed the line of the Wadi Hafrir before returning to the east. The enclosure wall contains a gate (1.9m wide) set within a small gatehouse. In the North East corner of the settlement there is a rectangular projection that contains a khan and a church (East Church/ Monastery Church) in south. The church was built in 435 AD according to a mosaic inscription which no longer exists.

Conclusion

A number of interpretations have been placed on the plentiful archaeological and documentary evidence from the site. For example the director of the Colt expedition argued that the site was deserted after the Abbasid revolution (i.e. 750AD) according to the archaeological evidence. This view was supported by Kraemer who edited the papyri found at the site (1958, 218). Gil on the other hand argued for an earlier date stating 'we find direct evidence of the destruction of agriculture and the desertion of the villages in the fact that the papyri of Nessana are completely discontinued after the AD 700' (Gill 1992, 275 & n. 40).

In contrast to Gil's surprising disregard for archaeological evidence in favour of his own assumptions a number of recent authors have begun to question the 750 AD date for the abandonment of the site (eg Magness 2000). Although the main publication of the excavations indicates that the site was occupied until the end of the seventh century there is considerable evidence in the same publication for continuity into the eighth, ninth and tenth centuries. This issue has recently been addressed by Magness (2000) who stated that 'substantial Islamic occupation is rendered invisible in the final report'. Archaeological evidence cited by Magness includes glass dating from the eighth to eleventh centuries, buff ware similar to that found at Khirbat al-Mafjar, softstone and black ceramic bowls (cf. Magness 1994). The archaeological evidence is complimented by the papyri which indicate that Nessana was still producing documents into the eighth century. The documents give some indication of the nature of the settlement indicating that there were still Christians at the end of the seventh century though there were also Muslims including Yazid ibn Fa'id who served as a judge (*qadi*) in 687 AD (67AH) (Colt 1962).

Whilst the above review of archaeological evidence indicates that the site was inhabited well into the Islamic period the table poses the question of whether Nessana should be considered as town. However in view of the known population of circa 1500 in the seventh century (Kraemer 1958: 218) it seems reasonable to classify it as urban even though some of the features normally associated with a town have not yet been identified.

Rehovot-/Kh. Ruheibeh[21]

This large deserted site (approximate size13 hectares) is located on elevated ground overlooking Wadi Ruheiba in the Northern Negev (Palestine Grid 108 048)[22]. The remains have evidence of occupation from the Nabatean to early Islamic periods.

From the area covered by the remains the excavators have estimated a maximum population of 4,800 though a figure in the region of 1, 300 seems more realistic. The economy of the town was probably based on the site's position on the Gaza-Ayla-Sinai route and agriculture in the loess beds of the near by wadis (Tsafrir 1993 295). Despite an absence of ancient references some information about the inhabitants is provided by

[21] Despite its large size the ancient name of the settlement is not known and the present name by which the site is known derives from Robinson who linked the site with. Rehoboth ,the well of Isaac (Gen. 26:22) on the basis of the similarity between the Arabic name of the site (Ruhebieh). Although this link is generally rejected by modern scholars the site has retained the name. More recently Tsafrir (1993) has sought to identify the site with one of the settlements known from Nessana papyrus No. 79, in particular Bethomolchon named after a Nabatean king , Malicheus I (mid 1st century BC).

[22] Alt 1921:Lecker 1989 24-37:Musil 1902, 2. Edom, 78-83:Lecker 198924-37: Nevo 1989. 18-23:Robinson 1838,196-7:Sharon 1993:Tsafrir 1993, 294-302: Tsafrir and Holum 1988:Tsafrir and Holum 1993: Tsafrir et al 1993; C.L. Woolley and T.E.Lawrence 1915, 114-6..

inscriptions (mostly published by Alt in 1921) found on the site. The majority of names mentioned in the inscriptions are either Greek in origin or Hellenised Biblical names with only one Nabatean and one Arabic name present. Tsafrir (1977, 424) contrasts this situation with Nessana suggesting that the population was 'moins ouverte à l'infiltration arabe que ne l'était la communauté de Nessana'. The tombstones display a range of dates with the latest tombstone (that of Stephen) dated to AD 601 (Alt 1921, 33 no. 86).

A number of buildings have been identified by the excavators including four churches and a 'stable' building. In addition a number of houses have been excavated in the south and south- eastern parts of the site. There was also a bathhouse to the south near the well that was destroyed by the Ottoman Turks some time after 1902 (a detailed description of this building is given in Musil 1907, 78-83).

Two of the churches have been excavated- the central church (Area D) and the North Church (Area E). The central church (approx. 12 x 20m) has a single apse indicating an early construction date (fourth century?) and was built in two phases; the date of the earliest phase is not known though the second phase is dated to 551 (or AD 555). The North church is much larger with its atrium making it 'one of the largest church complexes known in the Negev' (Tsafrir 1993, 229). The complex comprises a basilica with three apses and a crypt below, a smaller chapel and an atrium . No building inscriptions have been found though tombstones and commemorative inscrip-tions give a range of dates from AD 488 to AD555. It has been suggested that the crypt below the eastern end of the church housed relics an idea strengthened by the fact that there were two staircases (up and down) and marble panels on the wall. An empty niche probably housed the relics which may have been removed when the city was abandoned (cf. Schick 1995: 441).

A number of Arabic inscriptions in Kufic script were found in the church which were presumably inscribed after the church ceased to function. One of these inscriptions contained very early Sufi ideas and was carved in 'exceptionally beautiful Umayyad- early Abbasid provincial script' whilst another relating to a resident of Ayla (Aqaba) was carved in 'a good Umayyad imperial script' (Sharon 1993, 50-54). Outside the main church in the atrium other Arabic inscriptions were found, the most important of which refers to Hakim ibn Asma, a client of 'Abd Allah ibn 'Amr al-'As (Sharon 1993). This latter inscription was carved onto a limestone slab (0.32 x 0.59m) that was lying *in situ* as part of a limestone floor in the atrium of the complex. This floor was made of paved slabs removed from the church after it had been destroyed/deconsecrated suggesting that this part of the complex was refurbished as residential accommodation in the early Islamic period. The excavators suggest a *terminus ante quem* of AD 700 for the abandonment of the renewed structure on the basis of an absence of glazed pottery and the inscription itself (Tsafrir and Holum 1988 a & b).

Excavations in the rest of the site were primarily concerned with residential buildings. In the south-east a house was partially excavated which was built in the Byzantine period (fifth century) but rested directly on earlier remains characterised by Nabatean and Eastern sigilatta. The excavators suggested that 'the large number of early potsherds indicates that the main ancient Nabatean settlement was located here in the south-east of the city' (Tsafrir and Holum 1993, 1275). This idea is supported by the fact that this is the nearest part of the site to Wadi Ruhiebeh and the deep well which led to its identification as Rehovot.

The other area where domestic structures were excavated is the southern edge of the site which is on a slope overlooking the wadi. The excavations concentrated on five rooms belongiong to two courtyard houses at the southern extremity of the site. The gaps between the buildings were blocked by a wall that formed the southern limit of the town. Pottery from the site dated from the fifth/sixth centuries and continued to the late seventh century. According to the excavators the stone paving slabs of the rooms were removed at some point and were later 'occupied by squatters who settled after the house had been deserted by its original inhabitants' (Tsafrir and Holum 1988a, 119). Several layers of ash with intermediate layers of wind-blown loess attest to several stages of 'squatter' occupation before the roof finally collapsed.

The largest non-religious building on the site is the building variously known as the stables or khan and is located next to the central church. It is a large rectangular building (31x 28m) with a central courtyard and rooms around the edge. In the north of the courtyard, next to the entrance there is a large room with wall troughs that has been interpreted as a stable and certainly shares some characteristics with buildings excavated at Shivta and Mampsis. The excavators suggest that this part of the building was founded in the second or third century and remained in use until the beginning of the eighth century AD. During its early phase the stables had an earth floor that was replaced with a flagstone floor in the Byzantine period. During the early Islamic period the east wall of the stables, flanking the main entrance, began to collapse and was supported by a specially built buttress. In the north east corner of the courtyard there is a rectangular room (approx 3 x 4m) which was built above earlier Byzantine remains. The room incorporated re-used decorative stones from the adjacent central church. According to the excavators this is the only example of new construction in the Islamic period rather than continuous use or re-use of earlier structures (Tsafrir and Holum 1988a, 119-121).

Table 11 Rehovot-/Kh. Ruheibeh Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (13 ha.)	A (13 ha.)			
Fortifications					
Religious buildings	A (4 churches)				
Secular public buildings	A (bathhouse)	A (bathhouse)			
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

Conclusion

The first point worth noting is that there is considerable evidence for occupation after the Islamic conquests in the early part of the seventh century. The evidence for the end of occupation at the end of the seventh century is based on the 'absence of decorated or glazed Arab pottery characteristic of the eighth and following centuries' (Tsafrir 1993, 296). Whilst this conclusion is generally acceptable it seems possible that there may have been some occupation after that date in view of the Arabic inscriptions one of which is dated to the 'Umayyad- early Abbasid period' (Sharon 1993, 50).

The second point is that the excavators characterise the Islamic period, (i.e after the churches went out of use) as a time of squatter occupation. However the evidence from the excavations reveals construction and refurbishment at this time. Evidence for construction includes the building in the north-east corner of the stables building and the paving of the atrium to the north church whilst the repair of the entrance to the stables building indicates that the whole building was in use.

The third point is that the 'squatter occupation' in the houses of Area B is characterised by the 'removal of flagstones' and the lighting of successive fires. Although it seems likely that paving stones were removed it is also possible that paving had not been completed in the rooms referred to. If the rooms had been paved with flagstones, which were subsequently removed, it is likely that they were intended for use elsewhere as it does not make sense to remove a good floor if you are going to live in a room (N.B a new paved floor was laid in the atrium during the early Islamic period). The layers of occupation before the collapse of the roof indicate successive stages of occupation with intervening layers of sand and loess. The 'absence of any typical eighth century pottery in even the latest layers of occupation' may indicate that there was no late squatter occupation or that the later inhabitants did not have large quantities of pottery a fact supported by Schaeffer's work in the Northern Negev (Schaeffer 1989).

Despite these qualifications it is clear that the town was in decline after the eighth century if not completely abandoned. The reasons for the desertion are not known although the location of Rehovoth on the Christian pilgrimage route between Gaza and St Catherine's and the decline of that route after the Muslim conquest may have had some impact. In this connection it is worth noting that one of the Arabic inscriptions published by Sharon (1993, 57-8) is written (or mentions) by Badr of Elat (Aylah/ Aqaba) implying that Rehovot was still on a route between central Palestine and the Red Sea.

Isbaita / Shivta

Large deserted site located in the north-west Negev approximately forty-three kilometres south west of Beersheba (Palestine Grid 1145 0325)[23]. The site has been identified with the settlement of Sobata mentioned in Nessana papyri dated to the seventh century (nos. 75 and 79). Another identification of the site is found in the fifth century Nilus narrative where it is referred to as Suk (Soubeita) (Mayerson 1975). The modern Arabic name from which the Hebrew name is derived has been given variously as Isbeita, S'beita and Sbeita. A.Negev suggests that the modern Arabic name is derived from the Nabatean personal name Shubitu (A. Negev 1993a)[24].

[23] The site was first described by Palmer in 1870 though the first detailed descriptions and plan was made by Musil over thirty years later (Musil 1902). A few years afterwards the site was visited by Jaussen and Savignac (1905) who made a study of the funerary inscriptions. In 1914 a systematic survey of the site was made by Woolley (Woolley and Lawrence 1916)followed two years later by Wiegand (1920). The first excavations were carried out by the Colt expedition between 1934-38 though unfortunately the final results of this project are still awaiting publication (preliminary reports were published by Baly 1935 and Colt 1935,1936 and 1948). With the creation of the State of Israel much of the site was cleared by the National Parks authority under the direction of Avi-Yonah between 1958 and 1960 though there is no published account of this work (Dauphin 1985). In the 1970s the site was surveyed by A. Negev (1993) and later by A. Segal who also carried out limited excavations (Segal 1983). In 1981 a new map of the town was made by Brimer based on aerial photographs of the site (Brimer 1981). Further excavations were carried out by Margalit in 1985 and a detailed study of the town plan was made by Shereshevski (1991).

[24] The principal references are: Avni 1994, 87-88 : Baly 1935: Brimer 1981 : Colt 1935 : Colt 1936 : Crowfoot 1936, 14-27 : Jaussen, A. et al 1905, 256-7: Kedar 1957 : Mayerson 1975 : Musil, A. 1902, *Arabia Petraea 2, Edom*, 36-45 :A. Negev 1981, 48-62 : A. Negev 1993a: Palmer, E.H. 1871, 29-32 : Schick 1895, 457-8 : Shereshevski 1991;

The city has an irregular shape aligned approximately N-S with a large reservoir in the centre of the southern part (Fig. 34). There are three churches, one near the reservoir, called the South Church, one at the northern extremity of the town (the North Church) and one mid-way between the two referred to as the Central church (see Plates 11-14). There are a large number of main streets dividing the city into blocks of irregular size and shape with smaller lanes providing access to individual houses. There is no city wall, though, as at Rehovot, the houses on the edge of the settlement are joined together so as to form a continuous wall.

The origins of the site are Nabatean, though little survives from this period with the exception of some displaced inscriptions and pottery published by Crowfoot (1936). The main period of the city's growth appears to have been the Byzantine period; thus in the fourth century it was described as a village but by the seventh century it had expanded to become a '*metrokome* [town] with three churches but it never achieved the status of *polis* [city]' (Dauphin 1985, 155). Like other Negev towns the economy was dependant on caravan and pilgrimage trade though it also had a sophisticated agricultural base that has been explored in detail by Kedar (1957) who estimated more than eighty (household?) groups who owned fields in the vicinity of the town.

There is considerable evidence for continued occupation of the site well into the Islamic period. The most obvious example of the continued occupation during the Muslim period is the mosque that is built next to the baptistery of the South Church.

The mosque was discovered by the Colt expedition in the 1930's (Colt 1936; Baly 177, 1935) and comprises a courtyard and sanctuary both paved with flagstones. The courtyard was entered by a broad set of steps on the west side. Two of the steps are re-used Byzantine lintels decorated with rosettes and crosses. In the north-west corner of the courtyard there is a small square opening providing access to a subterranean cistern. A small step marks the transition from the courtyard to the prayer hall. Three arches (no longer standing) provided access to the prayer hall (6.7 x 8.6m). This was divided into nine bays supported on six central columns and arches springing from the walls (cf Avni 1994, 87-88, 90 Fig. 8, which incorrectly states that there were only four columns). The roof was made of transverse arches covered with large flat limestone slabs (this is the typical construction technique in the Negev). In the centre of the south wall there is a deep concave *mihrab*. The arch of the *mihrab* was converted from a doorway that originally led into the baptistery (Baly 1935, 177). According to Segal (1983, 16-17 Fig 14) the construction of the mosque blocked a lane that led from the southern church.

The date of construction is not known, though Baly (1935) states that the building has Kufic inscriptions datable to the ninth century AD (cf Colt 1936 who states 'adjoining the baptistery to the north are the remains of a small mosque. From this came several stone blocks covered with Cufic inscriptions which may be as early as the ninth century'). One of the inscriptions records the building of the (a?) mosque by a 'Hassan' although unfortunately this is not dated (Baly 1935). However the architecture of the mosque gives some indication of the date, thus the concave form of the *mihrab* suggests a date after AD709. The first concave *mihrab* was introduced by 'Umar ibn Abd al-Aziz when he rebuilt the mosque of Medina in 709 and the second was in the Mosque of 'Amr in 710-12 (Creswell 1989,46). The other notable feature of the building is the construction of the prayer hall that is divided into nine bays. The lay-out resembles nine-domed mosques that are a feature of Islamic architecture from the ninth to the sixteenth centuries (King 1989; Petersen 1996a, 209-211). Although this building was almost certainly not roofed with domes the similarity of the layout may be significant suggesting a late eighth or ninth century date.

Other indications of continued occupation into the Muslim period include the fact that the floor of the South church was re-laid in AD 639 according to an inscription in the south aisle (Baly 1935; Negev 1981, 48-61). As there was no evidence of destruction it seems likely that the inscription referred to the replacement of a worn floor rather than repairs after the previous floor had been destroyed (cf Schick 1995, 458). The only evidence of deliberate destruction was one of the lintels with a carved depiction of birds, other animals and a cross. The birds and animals were defaced by chisel though the cross was undamaged, perhaps indicating that the damage was carried-out by Christians in response to demands from Muslim officials (cf Schick 1995, 218-9, 458).

In the North church and monastery there are a number of burials marked by tombstones dating from 582 to 679 again indicating a continuity of use (Negev 1981, 48-61; Schick 1995, 457). There are also a number of Arabic inscriptions in the Atrium and Narthex that Baly describes as 'Cufic in character of the ninth century'. Unfortunately the inscriptions were not published because according to Baly 'They are of no historical importance being chiefly invocations to God' (Baly 1935, 176).

In addition to the evidence from the churches and the mosque pottery found all over the site indicates continued occupation into the Islamic period. Unfortunately this pottery has never been published although descriptions and a photograph have appeared in reports. According to the excavators the buff ware moulded pottery could be dated to the thirteenth and fourteenth centuries (Colt 1936). However examination of the photograph reproduced in Baly (1935, Plate VI Fig.2) indicates that the pottery is similar to the moulded buff wares excavated at Ramla and elsewhere and should be dated to the 9th and 10th centuries AD (cf. Cytryn-Silverman 1999, 38-9).

Segal 1983 : Wiegand, T. 1920, 62-83 : Woolley & Lawrence 1916 72-93.

Table 12 Isbaita / Shivta Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (11 ha.)	A (11 ha.)			
Fortifications					
Religious buildings	A (mosque & churches)	A (mosque & churches)			
Secular public buildings					
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

Table 13. Kh. Futais/ Kh. Futeis Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ Population	A (25 ha.)	A (25 ha.)			
Fortifications					
Religious buildings	A (church?)				
Secular public buildings					
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical

Conclusion

The archaeological evidence indicates that Christianity continued to be practised in the town until at least 679 and that a community of Muslims was established there by the eighth century. It seems probable that the site was abandoned after the tenth century AD.

Kh. Futais/ Kh. Futeis

This site is located north- west of Beersheba between Ofaqim and Gazit in the northern (Negev Palestine Grid 114-081)[25]. The remains consist of a large site estimated to have a circumference of 1.8 kilometres on the north bank of the Wadi Futtais. The ancient name of the site is not known though there is a suggested idenitification with Aphtia which Avi-Yonah regards as very doubtful (*GRP* 88). A more likely identification is with the site of Photis on the Madaba map (Donner 1992, 72).

The site is characterised by twenty large cisterns (diameter 4m depth 4-6m) built of rubble stones set in mortar (**Plate 15**). The roofs of the cisterns are of conical form with the remains of ceramic pipes embedded in the mortar. In addition there are six stone lined wells that are built into the bed of Wadi Futtais. A recent survey of the site was made by D.Alon (unpublished?) while engaged on the excavation of the nearby site of Gilat. This survey recorded a number of cisterns, the remains of a large public building and a limestone slab with a seven line Greek inscription mentioning Bishop Basilius. In 1987 a rescue excavation was carried out by the Department of Antiquities during the construction of the Gilat-Ofaqim road. A large area was uncovered (220 square metres) with a number of construction phases visible. The excavations distinguished six main phases of occupation ranging from the Byzantine to the Fatimid period (Statum 6 =Byzantine, stratum 5 =Umayyad and strata 4-1 Fatimid period). The excavators distinguished remains of a 1.4m wide wall aligned NE-SW originally built in the Byzantine era though it continued in use in the later periods. In stratum 4 several rooms aligned NE-SW were uncovered. There were also remains of buildings in strata 1 and 2. All the walls were made of mud brick or pisé resting on stone foundations. Glazed pottery was found in stratum1-4[26].

Unfortunately the excavations at the site have not been reported in great detail so that no firm conclusions can be made. However the available information implies that this was a large, possibly urban, settlement which flourished in the Byzantine and early Islamic period.

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[25] Dauphin 1998, 958; *GRP* 88; Israel 1976,202; Nahlieli and Israel

[26] Glazed pottery was also found during my own investigation of the

9. EASTERN GALILEE TOWNS

INTRODUCTION

Climate and landscape

The borders of Eastern Galilee are marked on the south by the Valley of Jezreel/Marj ibn 'Amir and on the east by the Jordan valley and the Sea of Galilee. The northern limit of the area is the Lebanese border and the western limit is the watershed between the wadis flowing west to the Mediterranean and eastwards to the Sea of Galilee.

Galilee as a whole is comparatively well watered with much of the area receiving more than 600mm. average annual rainfall (MacDonald 2001, 506 Fig. 17.1). The precipitation is mostly a result of its elevation and proximity to the Mediterranean. Much of the region is mountainous with a lower range of hills/mountains in the south rising to a height of just over 500m a northern part where they rise to a height of over 1200m. The effect of the elevation is increased by the Jordan valley and the Sea of Galilee to the east parts of which lie more than 200 metres below (Mediterranean) sea level. The geology of the region is complex with an essentially limestone/ dolomite formation in the west giving way to the basaltic region bordering the Sea of Galilee in the east (Goldberg 1998). The natural vegetation reflects the geological diversity though in general it may be classified as open forests in the south (*Quercus ithaburrensis*) and west (*Ceratonia siliqua* and *Pistacia lentiscus*) and more dense woodland (maquis and forest) in the north. The area bordering the Sea of Galilee is open grassland with bushes (Savanoid Mediterranean) in the lower parts and herbaceous vegetation (including *Ziziphus lotus*) higher up the slopes (Danin 1998).

Although in terms of natural geography there is little to distinguish Eastern and Western Galilee there is a cultural/political division, which appears in different periods thus the western border of the Byzantine province of Palaestina II ran directly through the centre of Galilee. This division was to re-appear in the Crusader and later periods (cf Ellenblum 1998, 253-276).

Unlike other areas of Palestine there is no obvious urban centre thus the regional capital has altered depending on historical circumstances (see **Fig. 35**). In the first century BC the capital was located at Sepphoris later moving north-east to the newly founded city of Tiberias in AD 18. Tiberias remained capital until the fifth century AD when Scythopolis/Baysan was became capital of Palaestina II. With the Muslim conquest in the seventh century Tiberias once again became capital. In the eleventh and twelfth centuries Tiberias was overlooked in favour of Acre as the regional and later overall capital of the Crusader kingdom. The capital was moved once more at the end of the thirteenth century when Safad was established as capital of the region[1]. It is notable that as each town rose to prominence the other towns declined in importance giving rise to the suggestion that the area could only really support one urban centre. The one exception to this is during the Byzantine period where one Baysan existed as a pre-dominatly Christian city and Tiberias as a Jewish centre.

Early Islamic Period (Fig. 36)

Both Baysan and Tiberias exhibit considerable continuity of settlement from the Byzantine period into the Umayyad period[2]. At Baysan the Umayyad period appears to have been fairly prosperous with considerable industrial activity, the construction of public buildings and housing. However there also appears to have been a re-orientation of the town with the city centre becoming an industrial area and a possible shift of occupation to the south and the area of the Ottoman/modern town. These movements may be a result of changes brought about by Islam or may have been part of the city's natural development away from the tell[3]. As might be expected the archaeology of Tiberias shows that the city expanded during the Islamic period probably as a result of its renewed capital status. The construction of a new Muslim quarter or *misr* as posited by Harrison (1992) is similar to the situation at Aqaba/Ayla and indicates a re-orientation of the Classical/Byzantine city.

In addition to the cities there are a few larger settlements which some have regarded as small towns most notably Capernaum. The archaeology at Capernaum shows a similar development to Tiberias with a new development to the north in the Umayyad period. In this case however the earlier Byzantine settlement appears to have dwindled at the expense of the new settlement of the Umayyad period (Whitcomb 1994).

Crusader Period (Fig. 37)

Under the Crusaders a number of settlements in Eastern Galilee had burgage courts which may be regarded as an indication of urban status. Using this criteria the area had six urban settlements; Tiberias, Nazareth, Safad, Baysan, Palmarea and Daburiyya[4]. However it is doubtful whether all of these could realistically have been regarded as

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[1] The capital of the region changed once more in the eighteenth century when Acre replaced Safed as the regional capital during the rule of Zahir al-'Umar.

[2] Unfortunately the later archaeology (post-Roman) of Sepphoris has only been investigated recently and it is possible that continuity from the Byzantine to the Umayyad period will also be demonstrated here.

[3] There is, for example, evidence of flooding in the area at the foot of the tell at Baysan during the Umayyad period giving a strong incentive to relocate higher up on the plateau to the south.

[4] Pringle (1995, 70-71) uses this definition of towns in an article on town defences though he admits this method is used more for its convenience and that the distinction between urban and rural settlements was not always clear cut.

Table 14 Rural Settlements

	Western Galilee	Eastern Galilee
Crusader Period	95	25
Mamluk Period	78 (17.9% reduction)	65 (260% increase)

urban settlements. For example contemporaries referred to both Palmarea and Daburiyya as villages. Even Baysan appears to have been of little importance thus William of Tyre (trans. Babcok and Krey, II, 494) writing in the twelfth century describes it as a village. Confirmation of its lowly status comes from the fact that the Episcopal see of Scythopolis (Baysan) was transferred first to Mount Tabor and later to Nazareth. Although Safed was clearly of some importance by the end of the Crusader period it significant that it did not emerge as a major Crusader urban centre until the reconstruction of its castle in 1240-1[5]. The importance of Nazareth as a town is more difficult to assess because of its religious significance as the third most important Christian shrine. It is possible that the Church of the Annunciation formed the nucleus of an urban centre though it is equally possible that beyond the ecclesiastical complex it was little more than a village as appears to have been the case with Bethlehem. Unfortunately archaeology provides little help because most of the only area that has been subject to excavation is the site of the Church of the annunciation. The only settlement which can be called a town with any degree of certainty is Tiberias which was enclosed by walls and had both a church and a castle. However the size of the Crusader city appears to have been considerably smaller than its early Islamic predecessor occupying an area not much larger than eight hectares (i.e. approximately the same size as Arsuf).

On the basis of the above summary it appears that the Crusaders only had one functioning urban settlement in eastern Galilee at any one time (first Tiberias and later Safed with Nazareth functioning as an episcopal centre). If this is compared with the coast of Galilee which covers a much smaller area (less than half the area) and contains at least two walled cities it can be seen that the area of Eastern Galilee was less well developed. The same impression is conveyed when rural settlements are considered thus Eastern Galilee contained 24 rural sites compared with 95 for western Galilee. Research by Ellenblum (1998, 213-276) suggests that the differential density of settlement in western and eastern Galilee may be a result of an underlying cultural difference with origins in the Byzantine period. He suggests that the western part of Galilee contained more sites because its native population was Christian and therefore more accommodating to the Crusaders. On the other hand the native population of the eastern part was predominantly Jewish or Muslim living in a smaller number of large villages and less receptive to Frankish settlement. Ellenblum also suggests that the number of settlements in eastern Galilee had been reduced by nomadic infiltration during the preceding centuries (i.e. early Islamic period).

Mamluk Period (Fig. 38)

The return of Muslim rule had a dramatic effect on the pattern of settlement in Galilee. The most well known effect was the destruction of the Crusader capital of Acre which together with the destruction of the other coastal towns meant there was no ancient urban centre left in the north of Palestine. On the other hand the Crusader stronghold of Safed was rebuilt by the Mamluk Sultan Baybars and became a major urban centre. The growth of Safed stimulated the regeneration of eastern Galilee as can be seen from the above table which compares the number of rural settlements during the Crusader period and after.

Despite the increase in the number of settlements in eastern Galilee during the Mamluk period there is no evidence for the revival of the areas around the ancient urban centres of Baysan and Tiberias. The growth of Safed is hard to explain when the ancient towns of Baysan and Tiberias contracted to the size of villages. However a number of reasons can be suggested which may be summarised as 1) security, 2) the destruction of the coastal towns 3) the decline of the sugar industry 4) the changing trade routes.

(1) Safad's location on a high mountain provides it with an extremely defensible position. The strategic value of the site was a prime consideration when it was made into a fortress by the Crusaders thus they considered that it would protect the whole of Galilee (*De Constructione Castri Saphet*, Huygens ed. 1981, 42-3, lines 243-7). On the other hand both Baysan and Tiberias are located on low level sites and were extremely vulnerable to attack. In this connection it is worth stating that this area of Palestine was subject to attacks from the Mongols and it is notable that the battle of 'Ayn Jalut took place near Baysan.

(2) The destruction of both Acre and Haifa as part of the Mamluk policy of destroying coastal cities meant that Galilee was left without any significant urban centres. Baysan was too small and too far south to compensate for the loss of Acre whilst Tiberias was unable to recover from the sacking by Khwarazmian tribesmen in the 1240's. Safed therefore appears to have filled a vacuum.

(3) A number of interconnected economic factors favoured the growth of Safed over its more ancient rivals. During the early part of the Mamluk period there is some evidence that the economy of Baysan was undergoing a revival based on the sugar industry (Ibn Shaddad ed. Dahan, 136) and its location on the Cairo Damascus trade route (cf Hartmann 1910, 694-702;

[5] It is notable that Safed only emerged as a regional centre more than half a century after Tiberias had fallen out of Crusader control and at more or less the same time that Tiberias was being sacked by

1918, 54). Physical evidence of this revival can be found in the thousands of sugar pots recovered from the former Crusader castle (Seligman 1996, 45) and the construction of the caravanserai to the west of the town in AD 1308 (Mayer 1932, 96, No.1, Petersen 2001, 115-7). However both of these sources of income seem to have declined by the fifteenth century. The decline of the sugar industry in the fifteenth century has been noted by a number of medieval and modern authors (see for example Qalqashandi *Subh* IV, 188, 190, 192 and Ashtor 1981; 1983, 206). The decline is generally unexplained though it seems likely that it was connected with the occurrence of plagues in the mid-fourteenth century and later. It has been estimated that the plagues reduced the population of the region by a third (Dolls 1977, 62, 159; 1981, 416-7). This would have had a particularly severe effect on labour intensive agriculture such as sugar cane cultivation, which needed large numbers of workers both for planting and harvesting. Maqrizi observed the effect of the plague on agriculture in general and stated 'when harvest time came very few labourers were found on the land. The amirs promised the peasants half the harvest, but they found no one to help them' (trans. Quatremere II, 774). In the light of such comments it seems likely that the plague was a major factor in the decline of the sugar industry and the towns and villages dependant on that industry.

The reverse effect of the plague was that it would have favoured agriculture that was not labour intensive, in particular sheep rearing. The mountainous areas around Safed, and in Galilee as a whole, were ideally suited to sheep farming and its is not surprising that by the sixteenth century the town had become noted for its production of wool (Cohen and Lewis 1978, 54, 60-1).

4) The Mamluks favoured the quickest and most direct route between Cairo and Damascus. In the early part of Mamluk rule (i.e. thirteenth and fourteenth centuries) the main trade route appears to have been via Baysan and Jisr al-Majami'a. In the fifteenth century the main route was further north via Safed and Jisr Banat Yaqub.

The reasons for this change are not known though it may be assumed that the decline of Baysan and growth of Safed played their part. The construction of the new caravanserai at Khan al-Tujjar (Suq al-Khan) by the Damascene merchant al-Mizza in the early fifteenth century ensured that the new northern route by-passed Tiberias which consequently lost its chance of recovery. It is noticeable that the only other example of urban development in the area apart from Safed is Kafr Kanna which is located within six kilometres of Khan al-Tujjar. By the sixteenth century Kafr Kanna had all the attributes of a town though unfortunately little is known about its condition in the fifteenth century.

Ottoman Period (Fig. 39)

Many of the processes, which had begun in the Mamluk period continued during the first century of Ottoman rule and for the first time quantifiable data is available (see Appendix I). For example the Ottoman documents provide the first detailed evidence for the discrepancy between the new urban centres of Safed and Kafr Kanna and the former towns of Tiberias and Baysan[6]. Although Kafr Kanna was counted as a village in the Ottoman documents it had a population of over two and a half thousand in 1596 whilst the growth of Safed was even more spectacular with a population of 12,450 in 1596-7. By contrast Tiberias had a population of little more than three hundred people at the end of the sixteenth century and Baysan's population was only a little over two hundred. During this period Baysan was no longer even the administrative centre of a *wilayet* and instead was simply one of a number of villages in the Ottoman *nahiya* Ghawr in the *liwa* of Safed[6]. The only urban developments which can be specifically attributed to this period are the attempt to rebuild Tiberias and the growth of Nazareth. The development of Tiberias was based on the cultivation of the silk worm and the hot springs, however for unknown reasons the project failed. The growth of Nazareth from a population of 245 at the beginning of the sixteenth century to 1515 at the end may be indicative of its position on the Cairo Damascus road or may be the result of increasing numbers of Christian pilgrims.

Baysan / Scythopolis (Appendix 1, Table 2)

Exploration

The first major excavation was conducted by the University of Pennsylvania Museum and concentrated on the tell (Tell Baysan/Tell al-Husn) which stands at the centre of the site. The primary concern of the excavations was the discovery of early remains (Iron Age and earlier) relating to Biblical Beth Shean however the latest layers of the site related to the Byzantine and Umayyad periods and were published separately (Fitzgerald 1931). The same expedition also undertook excavations on Tell Iztaba to the north where a Byzantine monastery was uncovered (Fitzgerald 1931). Since 1948 a number of Israeli excavations have taken place most of which were concerned with uncovering the remains of the classical city. The frequency and scale of these excavations was increased after 1986 as part of an initiative to develop the site and town as a major tourist destination undertaken by the Israel Antiquities Authority and the Hebrew University (for a review of these excavations see especially *ESI* 11 and Tsafrir and Foerster 1997). The cumulative results of these excavations have been the uncovering of major monuments of the classical /Roman period including an amphitheatre, hippodrome, theatre,

[6] It is interesting that both Tiberias (Tabariyya) and Acre ('Akka) retained their status as administrative centres of *nahiyas* within the *liwa* of Safed.

odeon, nympheum, temples, bathhouses, colonnaded streets and various public monuments (**Fig. 40**). In the process of uncovering these major monuments considerable evidence of later Byzantine and Umayyad occupation was uncovered terminating with the earthquake of 18th January AD749. This has meant that the site is one of the best available documented examples of the transition from Classical Antiquity to early Islam. In addition there is also evidence of occupation beyond the earthquake into the medieval and Ottoman periods although in general this has received less attention.

History

In the third century BC the Ptolemies established a Hellenistic town on the site which was given the status of a polis under the Seleucids and given the name Nysa-Scythopolis. The origin of the name Scythopolis is obscure though it remained the official name of the town until the Umayyad period when the semitic name Baysan was revived. In 63 BC the city was annexed as part of the Roman province of Judaea and later became one of the Decapolis (league of Ten Cities) of which it was the largest member. In from the early fifth century the town was the capital of Palaestrina Secunda. The importance of the city during the Byzantine period was reinforced by its being the seat of a Metropolitan bishop and it was also noted for its learning, thus the hagiographer Cyril of Scythopolis came from the city.

The city may have been incorporated into Islamic territory as early as 634 under the leadership of Khalid ibn al-Walid who defeated a Byzantine army in the vicinity. In any case the town was certainly under Muslim control by 636 when Shurahbil ibn Hasana occupied the region of the Jordan river (Tabari ed. Guidid, I, 2397; trans Friedman 1992, 183). After the conquest the inhabitants of the city were obliged to give money and crops as tribute and to give half of the houses of the city to the Arabs. Administratively the town was now part of the Jund al-Urdunn which replaced the former Byzantine administrative district of Palaestina Secunda. Little is known of the history of the town in the Fatimid and Abbasid periods though the tenth century geographer al-Muqaddasi described it as a flourishing city that produces all the rice that is consumed within the provinces of al-Urdunn and Filastin He also noted that the mosque stood in the market place and that many men of piety make their home in this town (1963, 180). In 1099 AD the Crusaders captured the town (which they called Bethsan) and made it the centre of a barony though they transferred the archi- episcopal see to Mount Tabor and then to Nazareth (Pringle, Churches, 1998, 63-4). In 1154 al-Idrissi described the town as very small with a lot of palm trees (ed. Gildmeister, 41). After the battle of Hattin the city returned to Muslim hands except for a brief period in 1217. However by this time the town appears to have been in a worse condition poor condition than that described by al-Idrissi half a century ealier, thus Yaqut al-Hamawi (died AD1225) states that there were only two palm trees (without dates) in the town where formerly there had been many (Beirut, 1955, 76). It is not clear to what extent the town was effected by the Mongol invasions of the thirteenth century or their defeat at nearby ʻAyn Jalut in 1260. Under the Mamluks there appears to have some revival of the fortunes of the town due to its location on the postal and trade routes between the twin capitals of Cairo and Damascus (see for example the construction of Khan al-Ahmar below). It was also a regional centre for the cultivation and processing of sugar (Ashtor 1981, 93) . Evidence for the recovery can be seen in the fact that the town was made the capital of the *wilaya* in the second frontier province of Damascus (Sourdel-Thoumine *EI* 2). Nevertheless the recovery appears to have been fairly limited thus Abu al-Fida (died AD1321) described Baysan as 'a small town without walls' (ed. Reinaud & de Slane, 242). The revival in the fortunes of the town does not appear to have continued into the Ottoman period when it is described as a village (*qarya*) with a population of 210 in the *nahiya* Ghawr within the *liwa* of ʻAjlun (Hütteroth and Abdulfattah 1977, 168).

Archaeology

This brief review of the history of the Baysan could in many ways be seen as typical of many similar towns in Palestine with a gradual decline from the status of a great city to a village with most of the decline occurring under Muslim rule. However the evidence of archaeology presents a more detailed portrait and perhaps indicates some of the mechanisms by which this change took place.

Byzantine Period

The form of the Byzantine period town was essentially that of the Roman city with a few modifications. The centre of the town remained the area at the foot of tell al-Husn with suburbs developing on the plateau to the west and south. There is even evidence of restoration of Roman monuments after the earthquake of 363 AD and the construction of new public buildings and monuments to deal with an increasing population. However obvious symbols of paganism such as the temples were destroyed[7] whilst churches and monasteries were built in their stead (a church was built on the remains of the Temple of Zeus on the tell and churches were built on tell Iztaba on the north bank of Nahal ʻAmal). Popular places of entertainment with pagan overtones slowly went out of use (the theatre ceased to function in the sixth century (Mazor and Bar Nathan 1994, 107-8), the Odeon was destroyed in 506/7 AD and the amphitheatre (formerly hippodrome) appears to have fallen out of use in the fifth century Tsafrir and Foerster 1997) though bathhouses continued to thrive and a major new bathhouse (the west bathhouse) was established in the city centre.

[7] The city centre temple was destroyed sometime before 404 AD, the Temple of Zeus was destroyed in the latter part of the fifth century, the temple next to the theatre went out of use in the fourth century (Tsafrir and Foerster 1997, 109-110).

Under the Romans there had been freestanding gates marking the entrance to the city. At some point during the Byzantine period the gates were joined together by a city wall that remained standing until the earthquake of AD 749.

Umayyad Period

The archaeology of the Umayyad period in Baysan is particularly interesting because of the earthquake of 749 which produced a destruction layer which seals the remains of the city in the late Umayyad period. At other sites it is usually impossible to distinguish between the material remains of the Umayyad and Abbasid periods which in historical terms are sharply differentiated (i.e. the shift of political power eastwards from Damascus to Baghdad). Similarly at other sites it is often difficult to distinguish between late Byzantine and early Umayyad remains, however at Baysan the *terminus anti quem* of 749 AD means that it is also easier to define preceding phases with some degree of precision.

City Centre

For reasons discussed above (i.e. tourism and heritage) the centre of the Roman town has been the subject of a massive archaeological programme and it is in this area that the majority of Umayyad remains have been excavated in an attempt to uncover earlier Roman monuments. A large range of Umayyad period structures have been excavated in this area including two pottery workshops, a textile dyeing area, a metal workshop, a lime kiln, an aqueduct several water mills and most spectacular of all a shopping street complete with arcades and a monumental gateway decorated with glass mosaic (**Figs. 40-41**). With the exception of the arcaded shopping street all of these structures are of an industrial nature and are a contrast to the monumental and public buildings which occupied this area in the Roman period. Indeed some of the Umayyad period installations indicate a systematic destruction of earlier structures, thus hall C of the West bathhouse was used as a lime kiln at this time (ESI 6, 1988, 11; ESI 7-8, pp.22). Similarly the *frigidarium* of the east bathhouse became a dyeing installation during this period (ESI 11, pp 36-7). Also parts of the city centre were used as a graveyard, thus the crescent shaped area identified as the Sigma contained four hundred burials that the excavators concluded were almost certainly Muslim (Bar-Nathan and Mazor 1992, 43-44, Tsafrir and Foerster 1997, 137).

The most obviously industrial buildings discovered within the complex include the two pottery workshops, one in the theatre and one in the former Byzantine agora which were linked by a path made of clay and potsherds. The workshop built into the theatre contained four pottery kilns and a vat for wetting the clay. The workshop in the agora contained three kilns and a two storey building with potters wheel which functioned as a workshop.

It is worth making some note of the presence of water powered flour mills in the centre of the ancient city. One was located 'on top of a broad limestone pavement leading to Palladius street' (ESI 11, 46, ESI 17,16) and two were uncovered above the *propylaeum* which connected Palladius Street with the baths (ESI 17, 20). It is also likely that the aqueduct uncovered north of the theatre (ESI 17, 7) had some part in supplying the mills though this has yet to be proved. The location of mills in this area is to be explained by the wadi (Nahal Parod) which runs in the valley between the tell and the plateau to the south. However the presence of mills in the area which formerly constituted the city centre further suggests that this area had become industrial.

The same circumstances which favoured the establishment of the mills in the Umayyad period (i.e. water supply) had earlier allowed the construction of the two bathhouses which functioned in the Roman and Byzantine period. The fact that the bathhouses did not continue or were re-used for some other purpose in the Umayyad period is unusual and has been commented on by Tsafrir and Foerstrer (1997, 137) who state 'the disappearance of the bath houses does call for an explanation, as [elsewhere] bathhouses functioned throughout the Umayyad period'[8].

The one building which, at first, appears to contradict the general decline of the city centre from a civic area to an industrial zone is the Umayyad shopping street (**Fig.41**) (previously dated to the Byzantine period see Tsafrir and Foerster 1997, 123 and n. 163). This building complex comprises a row of twenty-two shop units with a portico at front and back. Approximately in the middle of this row of buildings there is a monumental portico with mosaic inscriptions on either side. One of the inscriptions is the *shahada* (Muslim declaration of faith 'There is no god but Allah…') and the other inscription states that the building was erected by the governor of the province of al-Urdunn, Ishaq ibn Qabisa during the reign of the Umayyad caliph Hisham (Khamis 1997,45-64; 2001, 159-76)[9]. Although this clearly indicates that the building was a prestigious state-sponsored project the design of the building clearly indicates a commercial use. This is confirmed by finds from within two of the shop units which show that they functioned as jewellers.

Outside City Centre

For reasons discussed above the majority of archaeological excavations have concentrated on the city centre which contains most of the Roman public monuments. The plateau to the West and South of the centre contains fewer monuments and is also, to a certain extent, overlain by buildings of the modern town. Nevertheless a number of excavations have taken place,

[8] Probably the best documented example of continuity is the bath house at Hammat Gader (Gadara) which includes an Umayyad inscription dated to the reign of Mu'awiyya (Di Segni 1999).

[9] Probably during the year 120 AH i.e. Dec. AD 737- Dec738 (Khamis 2001, 170).

in particular in the area between the theatre and the hippodrome, which have revealed a residential quarter which flourished from the Byzantine to the Umayyad period. Although it has been assumed that the main phase of development in this area was the Byzantine period (e.g. Peleg ESI 2, 1983, 13-14) recent excavations have shown that there was considerable high quality construction work after the Byzantine conquest. For example an area recently excavated to the west of the amphitheatre/hippodrome revealed a large structure with an open stone pave courtyard and mosaic floors which was dated to the Umayyad period (the mosaics were dated by potsherds of the 6^{th}-early eighth century sealed beneath the floor) (Avshalom-Gorni 2000, 29*). There has also been considerable archaeological activity to the east of the amphitheatre/hippodrome particularly in the area around the Crusader citadel and Ottoman period serai. Of particular interest is a high status building discovered in the north moat of the Crusader castle which had colourful mosaic floors and a hypocaust which has been dated to the Byzantine/Umayyad period (**Plate 17**)(Seligman, ESI 15 43-4). To the north of the *serai* another high-status building was uncovered also with mosaics (black lozenges on a white background) which was founded during the early Islamic period (Avashalom-Gorni 2000, 30*). Further south on the eastern edge of the modern town recent excavations revealed a series of courtyard buildings which can be dated to the Byzantine and Umayyad periods. Although the dating of these 'luxurious residential dwellings' is problematic it is apparent that they continued in use until the earthquake of 749 AD (Sion ESI/HA 112, 40*-41*).

The other area where there appears to have been major residential development in the Umayyad periods is Tell al-Husn. During this period the tell was enclosed within a wall and a small mosque was built on the ruins of an earlier building (Fitzgerald 1931, 11-17, PlXXIII, 2; Mazar 1995, 59-60). By contrast the area of Tell Iztaba appears to have suffered a decline during this period with buildings being abandoned (Mazor and Bar Nathan 1994, 137). Although by way of caution it should be mentioned that buildings in this area were churches, monastery and a synagogue none of which would have been expected to flourish at this time (cf Tsafrir and Foerstrer 1997, n.238).

Abbasid and Fatimid Periods

The fate of Baysan after the earthquake of 749 is substantially less well less well known than the preceding Umayyad and Byzantine periods. The reason is that the post earthquake remains lie closer to the surface and are quite distinct from the classical buildings which the excavators wished to identify and preserve. Nevertheless a few structures have been identified together with numerous fragmentary walls.

The most conspicuous building of the Abbasid period is the rectangular mosque located to the south of the Nymphaeum. Originally this building was thought to belong to the Mamluk period (ESI6, 32) but subsequent research has shown that it must have been built in the Abbasid period (ESI 19, 29). It is unclear to what extent the industrial activity in the city centre was continued after the 749 AD earthquake though it certainly appears to have been reduced.

There is an assertion by Tsafrir and Foerster (1997) that the centre of the town shifted to the plateau in the Abbasid period. It is not clear whether this statement is based on the evidence of Abbasid remains in this area or simply the assumption that the centre moved to this new location sometime between the earthquake and the construction of the Crusader castle circa 1099.

One building which might hold the key to a re-location is the mosque of Forty Martyrs (Jami al-Arbain) located 250m north of the *serai* (**Fig. 16**). As it stands the building dates to the nineteenth century (it was rebuilt in the 1870s) but its form with a square minaret suggests that it may be considerably older. An inscription previously incorporated into the building but now lost gives a hijri date which has been interpreted as 806 AD.

The only area where there is evidence of significant construction during this period is on the summit of Tell al-Husn where a number of houses and a hall abutting the enclosure wall were built (Fitzgerald 1931: Mazar ESI 18 (106) 1998, 46).

Crusader, Ayyubid and Mamluk Periods

The Crusader conquest of Baysan marks another defining point in the history of the town marked by the construction of the castle. Apart from the castle enclosed with a water filled moat there is little in the town that can be attributed to the period of Crusader rule (Seligman ESI 15, 44-7). There is evidence for re-use of the castle during the Mamluk period with installations and pottery connected with the sugar industry built in the northern part of the moat. In the later part of the Mamluk period the citadel had largely collapsed although one of the surviving rooms appears to have functioned as a smithy.

Evidence of the medieval period is evident elsewhere on the site although in general it cannot be related to specific buildings. One Mamluk building which has been identified is located to the south of the castle and *serai* and consisted of six rooms with earth floors. One of the rooms included a pit containing a stack of nearly 30 fritware bowls (Building I, Sion 2000, 40*-41*). It also appears that Tel al-Husn was redeveloped during this period with a new wall and gateway erected on the remains of the early Islamic wall. In addition to the fortifications a large building was erected on the north of the tell during this period (Mazar 19995, 59-60).

The only monumental building which can be attributed to this period is Khan al-Ahmar located to the north of the town and dated to AD 1308 (**Fig. 18**) (Mayer 1932, 96, No.1, Petersen 2001, 115-7).

Table 15. Baysan / Scythopolis Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (134 ha.)	A (134 ha.)			
Fortifications	A	A	A		
Religious buildings	A (churches)	A (mosques)		A (mosque)	
Secular public buildings	A (bathouses)	A			
Commercial buildings	A (shops)	A (shops)		A (khan)	
Industrial activity	A	A			

A= Archaeological Evidence, H= Historical Evidence

Early Ottoman Period

Although a few remains of the Ottoman period have been recovered these mostly appear to date from the later period and there is nothing that can with any certainty be dated to the sixteenth century.

One of the main observations from the above summary is that archaeological evidence suggests considerable continuity from the Byzantine to the Umayyad period. In addition to this general observation there are a few more specific points which may have wider implications. Firstly it is noticeable that no mosque of the Umayyad period has been found in the area of the city centre and the only Umayyad period mosque is that located on the tell. The second point is that there is an absence of bathhouses of the Umayyad period[10] despite the fact that elsewhere bathhouses are a feature characteristic of this period. The third point is that there is considerable evidence for industrial activity in the Umayyad period whereas the evidence for Byzantine industry is restricted to a single glass workshop. The above points all indicate the centre of the city under the Umayyads had shifted elsewhere. One suggestion is that the centre had shifted to the plateau to the south in the vicinity of the later Crusader castle although there is no positive evidence of this. Another suggestion is that the area on top of the tell had become the administrative centre of the city in the same way that Islamic Ayla became the administrative centre of Ayla.

The archaeological evidence for the Abbasid period is very limited and provides little to support an urban status. On the other hand the historical evidence suggests that Baysan was still a city of considerable importance in the Abbasid and Fatimid periods. The conclusion must be that either the historical accounts exaggerate the importance of the site from the mid-eighth to eleventh centuries or that that the physical remains lie in an area which has not been subjected to intensive archaeological investigation (eg in the area of the modern town).

The archaeological evidence for the Mamluk and Ottoman periods is also sparse and is generally restricted to the area in the vicinity of the Crusader castle. During the Mamluk period the site may have had a residual status of a town though under the new Ottoman administration it was officially recognized as a village (*qarya*).

Kafr Kanna

This settlement is located to the north-east of Nazareth (Palestine Grid 1822 2393) (Jaffa Research Centre 1991, 491-2).

The site is of some antiquity and is often regarded as the place where Jesus turned water into wine (John 2, 1-2) though this was also thought to have taken place at Khirbat Qana several kilometres to the north (Pringle 1998, 162-4). One of the earliest descriptions is by the pilgrim Willibald who visited sometime around AD725 and commented on the large church (Tobler and Molinier 1877/80, I, 260). In the eleventh century the site was visited by Nasir-i Khusraw who described the strong gate and beautiful monastery (ed. Scheffer , 18, 59). During the period of the Crusades (i.e twelfth and thirteenth centuries) Khirbat Qana was regarded as the place of Jesus' miracle although from the fourteenth century onwards Kafr Kanna was again the preferred site. None of the early descriptions of the site refer to it as anything but a village though by the sixteenth century it had become a town with a large mixed population of Jews and Muslims, a *qadi* and urban market taxes (see Appendix 1 Tables 9 and 10).

Unfortunately there has been little archaeological investigation of the place and it is not clear why it became so large in the sixteenth century.

Nazareth

History

Nazareth is first mentioned in the New Testament (Luke 1. 26-38) as the place where Jesus grew up (*TIR*, 194). The first church was established there some time in the fourth century. By the eighth century there were both

[10] With the possible exception of the structure located within the north moat of the Crusader castle.

Table 16. Nazareth Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population					H (Pop. 1515)
Fortifications					
Religious buildings	A (church)	A (church)	A (church)	A (church)	A (church)
Secular public buildings					
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

Muslims and Christians living in the city. The fact that there were two churches in the town and the Christians were required to pay a poll tax (*jizya*) suggests that the majority of the population was Christian. After the Crusader conquest in AD 1099. Nazareth was designated as a special pilgrimage centre although it had already been an important Christian shrine before that time. The town became the seat of an archbishop and a new cathedral was built . In 661 AH (1263 A.D.) Baybars ordered the destruction of the church at Nazareth (Mujir al-Din trans. Sauvaire, 237). With the return to Muslim rule the town lost some of the status it enjoyed during Crusader rule. Al-Dimashqi, writing at the beginning of the fourteenth century describes Nazareth as a city (*madina*) belonging to the province of Safad and inhabited by Yemeni Jews (ed. Mehren, 212). Khalil al-Zahiri, writing in the fifteenth century, lists Nazareth with Kafr Kanna and Minya within the *mamlaka* of Safad as villages big enough to be considered as towns (ed. Ravaisse, 44). Qalqashandi writes that the site was the administrative centre of a *wilaya* within the *mamlaka* of Safad (ed. Ali, IV, 240-241)

In the Ottoman tax registers Nazareth is listed as a village in *nahiya* Tabariyya (Tiberias) within *liwa* Safad. (Hutteroth and Abdulfattah 1977, 188). During the century the population rose from 49 households in 1525-1526 to 232 households in 1574 (Lewis 1965, 421). By the end of the century the population had risen to 303 households (total population approximately 1515) of whom only 17 were registered as Christian (Hütteroth and Abdulfattah 1977, 188). Nevertheless only one *imam* (as well as a *mu'adhdhin* and a *khatib*) were recorded for the period between 1555-1556 (Cohen & Lewis 1965, 419).

Archaeology

Unfortunately very little is know of the archaeology of the town with the exception of the churches (see for example Dauphin 1998, 683-4 No. 173 and Pringle 1993, II, 117-50).

Conclusion

The available historical evidence indicates that the town had a special religious status which was enhanced under Christian rule (Byzantine or Crusader). The fact that no fortifications are recorded for the site in any period suggests that it was never of great importance outside the religious sphere.

Safed

History

The city of Safed is located in the mountains 40 km east of Acre and 20 km. north of Tiberias (Palestine Grid 196 263). The name of the city is derived from the Hebrew word, *sefat-* lookout post, presumably a reference to the extensive views from the hilltop. It is not mentioned in the Old Testament but the Talmud refers to it as a place where fires were lit during festivals (Avi-Yonah 1971, 626-632). Apparently this was fortified by Josephus in 66AD in preparation for a Roman attack. There are no references to Safed during the Byzantine period and the only indication of its existence during the early Islamic period is the use of the *nisba* al-Safadi in the Cairo Geniza documents (Gil 1992, 213-4 and Amitai-Preiss in EI2, 757).

In the eleventh century there appears to have been a small village (Burj al-Yatim) on the site with a tower built by the Muslims (Ibn Shaddad, 146 ed. Dahan). The village had a mixed population of Jews and Muslims as indicated by the fact that it contained both a mosque and a synagogue (*De Constructione Castri Saphet*, Huygens ed. 1981, 38, lines 125-6). It is not clear when the Crusaders first established a fortress at the site though it was certainly before 1168 when it was transferred to the control of the Templars (*RRH* no.447, 1168). According to Muslim sources the castle was established as early as 1102 and in 1140 it was re-built by King Fulk the constable of Tiberias. In 1187-88 AD in the aftermath of Hattin it was captured by Salah al-Din and given as a fief (*iqta*) to one of his commanders. Over thirty years later in 617 AH (1219-20 AD) the site was acquired by al-Muazzam 'Isa who destroyed the fortress. Twenty years

later, in 1240, the site was returned to the Templars who began an ambitious programme of reconstruction. The rebuilt castle was provided with a garrison of 1,700 which could expand the 2,200 in times of war. In July 1266 AD (664 AH) the castle was captured by the Mamluk Sultan Baybars who proceeded to re-fortify it (the process was completed by his successor al-Mansur ibn Qalawun).

By 1266 (i.e the time of Baybars conquest) Safad had acquired the status of a town with its own burgess court and a faubourg attached to the castle. During the Mamluk period the town was established as a regional centre provided with hospitals, bathouses, mosques and religious schools (Mayer et al. 1950, 41). Abu al-Fida, writing in the early fourteenth century describes Safad as a town of medium size with suburbs and gardens extending over three hills (Abu al-Fida, ed. Renaud de Slane, 243). After 1348 the population appears to have declined as a result of the devastation caused by the Black Death (Amitai-Preiss in EI2 , 758).

The importance of the town was recognized by the Ottomans who established Safed as administrative capital of a *liwa* in the early sixteenth century. During the first fifty years of Ottoman rule the population more than doubled rising from 926 households in 932 AH (1525-6AD) to 1,931 in 975 AH (1567-8AD) partly as a result of the Ottoman policy of accepting Jews expelled from the Ottoman peninsula (Cohen and Lewis 1978, 155-161. The city was divided into four main Muslim quarters (Al-Akrad, Al-Sawawin, Al-Ahmar, and al-Wata) and a Jewish quarter subdivided into twelve smaller units. The influence of Jews on the economy of the town is significant as can be seen from the Ottoman attempts to move rich Jews from Safed to Cyprus '...to restore the commercial prosperity of the island after the expulsion of the Venetians' (Lewis 1952, 29). Textiles were the principal industry involving both the production and dyeing of cloth. The town was particularly suitable as it had a plentiful supply of water which was important both for washing the wool and to power fulling hammers. Some idea of the growth of the industry can be gained by the fact that in the thirty years between 1526 and 1556 there was an increase in the number dye houses in the city from two to four (Cohen and Lewis 1978, 60).

Archaeology

The earliest remains excavated at Safed date from the Middle to Late Bronze age and are associated with burial caves (Stefanski, 1987). Other pre-medieval remains include architectural fragments that have been identified with a third century AD synagogue. In general, however, there is very little archaeological evidence of pre-Crusader settlement at the site.

The focus of the Crusader period settlement was the castle which occupied the summit of an elongated hill. The castle had a concentric plan (approx. 170 x 300m) which followed the natural contours of the hill (Pringle 1985). Although the historical sources indicate that the castle served as the focus of an urban settlement there is no evidence that this extended beyond the walls of the fortress (cf Pringle 1993-, II, 206-7).

In the Mamluk period the castle remained an important aspect of the town although the concentric plan of the Crusaders had been enhanced by the addition of a huge cylindrical keep. By this time the town itself was located on less hilly ground to the south west and east of the citadel.

The layout of the Mamluk town was based on a number of quarters each with its own Congregational mosque (**Fig. 43**). Three of these mosques have survived (at least until 1948) Jami al-Ahmar, Jami al-Jukander and Jami' al-Arbain. The main congregational mosque Jami al-Ahmar was built on the orders of Baybars in 674 AH (1274-5 AD) and restored in the fourteenth and seventeenth centuries. It stands in its own quarter to the south of the citadel and may indicate an attempt by Baybars to initiate an urban settlement in this area (cf Ramla). Other Mamluk period mosques include Jami al-Jukander (or Iskander) built between 1309-11 AD which is located in the Kurdish quarter (*Haret al-Akrad*) and Jami' al-Arbain built in 1453 AD and located in *Haret al-Wata* to the east of Jami al- 'Ahmar . In addition there are a number of other mosques whose date of construction is not known though they may have Mamluk origins such as the Jami al-Suq, which as its name implies stands in the market to the south of the Jewish quarter.

In addition to the congregational mosques there are a number of other Mamluk religious buildings including two Zawiyas and a pseudo-Biblical shrine. The two Zawiyas include Zawiya Banat Hamid built in 1372 and located near the Red Mosque (Jami al-Ahmar) and Zawiyat ibn Habib (exact date of construction not known) located to the east of the citadel. Both the Zawiyas are architecturally impressive though the most significant construction is the shrine known as 'The Cave of the Daughters of Jacob' (Mugharrat Banat Ya'qub). This cave is located in the cemetery to the south of the citadel and includes a mosque, the funerary monuments of prominent Mamluk officials and their families and the shrine itself. Above the entrance to the mosque there is a foundation inscription stating that 'this place of pilgrimage' was built on the orders of the Mamluk governor of the town.

In addition to the religious buildings there are a number of other structures in the town which may be of Mamluk origin. For example Makhouly, an inspector working for the Depatment of Antiquities of Palestine stated that the now vanished Khan Ni'amat al-Dabbur was 'purely medieval work with finely dressed masonry and groined vaults' (PAM 28.8.44). More recently an excavation in the Old Jewish quarter (i.e. to the west of the citadel) revealed parts of a large vaulted building which was thought to belong to the 'Khan of the Jews' built in the mid sixteenth century (Damati 2000).

Table 17. Safed Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population				A (50 ha.)	A (50 ha.)
Fortifications			A	A	A
Religious buildings			H (church)	A (mosques)	A (mosques)
Secular public buildings				H	H
Commercial buildings				A (khan)	A (khan)
Industrial activity				H	H

A= Archaeological Evidence, H= Historical Evidence

Conclusion

Although the historical sources indicate that Safed was established as an urban centre under the Crusaders it is clear from the archaeological evidence that Crusader settlement was mostly within the castle and was primarily of a military nature. The location of the extant Mamluk buildings (i.e. dispersed around the citadel) indicates that the basic town plan of Safed was formed in the Mamluk period though based on the original Crusader fortifications. In view of the detailed historical information available for the town in the sixteenth century (and earlier) period it should be possible to carry out a detailed archaeological survey of the town to produce a model of urban development.

Sepphoris/ Safuriyya

This site is located on a hilltop in Galilee approximately 7km north of Nazareth (Palestine Grid 1756 2399). The centre of the town forms an acropolis with a lower town to the east (**Plate 19**).

History

At the beginning of the first century BC Sepphoris was administrative capital of Galilee and remained the pre-eminent city of the region until the foundation of Tiberias by Herod Antipas in the year 18 AD. During the Roman period the city was an important regional centre, especially for the Jews who established it as the seat of the Patriarchate and Sanhedrin (Avi Yonah 1971-2). In the mid fourth centuries two events had a dramatic influence on the fate of the city. The first of these events was the Jewish revolt against Gallus Caeasar in AD 351/2 when Sepphoris was used as a base for the rebels. Following the suppression of the revolt the inhabitants of the city were punished though the extent of this punishment is not known. The second event to have a detrimental affect on the city was the earthquake of 363 AD which may have further reduced the size of the population. During the Byzantine period the city remained an important centre and was the seat of a bishop though the number of historical sources describing the city are less numerous than for the Roman period. Similarly there are few references to the town during the early Islamic period though there are enough to suggest that it was of regional importance thus al-Baladhuri (Hitti and Murgotten 1916-24) describes the terms under which it surrendered to the early Muslims. During the Umayyad period a mint was active at the site. There is little mention of the site during the Abbasid and Fatimid periods though the place does appear to have a Jewish community in the eleventh century (Gil 1992, 323, n.89). In the twelfth century a small castle (Pringle 1997, 92) and a church (Folda 1991; Pringle 1993- II, 209-18) were established at the site by the Crusaders. Although the church is larger than one might expect (Folda 1991, 90) there is no evidence that the site was anything more than a village at this time (for example there is no record of a burgess court). In 1187 the site was used as a camp by the Crusaders prior to the battle of Hattin (Runciman 1952, 456). In April 1263 the settlement was destroyed by the Mamluk Sultan Baybars and there is little historical information about the site for the remainder of the Mamluk period. In the sixteenth century the site was classified as a village though it had a large population of approximately 2000 (i.e. 400 households) (Hütteroth and Abdulfattah, 1977, 188). The village continued to be inhabited until 1948.

Archaeology

The first major excavations at Sepphoris were carried out by a team from the University of Michigan in 1931 (Waterman 1937). More than fifty years later a renewed series of excavations was carried out by teams from America (Duke University and University of South Florida) and Israel (Hebrew University).

The principal aim of the excavations has been to investigate the archaeology of the city in the early Roman period and until recently very little attention was paid to the archaeology of the later periods[11]. However recent

[11] See for example Netzer and Weiss 'the Byzantine archaeological remains that were produced by the first five seasons of work were…unimpressive leading to the hypothesis that the earthquake of 363 had… led to a dwindling of settlement' (1995, 164).

Table 18. Sepphoris/ Safuriyya Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population					H (Pop.2000)
Fortifications		A			
Religious buildings	A (church)				
Secular public buildings	A (bathhouse)	A (bathhouse)			
Commercial buildings	A				
Industrial activity	A	A			

A= Archaeological Evidence, H= Historical Evidence

work has shown a considerable amount of repairs after the earthquake in 363 AD and the construction of some prestigious new buildings such as the 'Nile Festival House' (Netzer and Weiss 1995, 166-71). By the late fifth or early sixth century the church appears to have assumed an important role in urban life with mosaic inscriptions recording the renovation of pavements by the bishop Eutropius (Weis and Netzer 1995, 43). At least one church and a synagogue dating to this period have been excavated and it is likely that they both remained in use into the early Islamic period. A medium sized bathhouse excavated in the central insula was also built in the Byzantine period and probably continued in use during the early Islamic period (Weis and Netzer 1995, 43). Next to the bathhouse a building with two square plastered pools was uncovered which was probably constructed in the early Islamic period and resembles similar structures at Caesarea. There is also evidence for continuity in the city's infrastructure, thus the aqueduct leading to the city was repaired as late as the eighth century (Syon 1995,49). Apparently the end of the Byzantine period is marked by a widespread burning. Netzer and Weiss (1995, 176) suggest three possible reasons for this, 1) the Persian conquest, 2) the Muslim conquest or 3) an earthquake. Although the excavators do not offer an opinion as to which cause is more likely they date the destruction layer to the end of the Byzantine period rather than the early Islamic period (Netzer and Weiss 1995, 176). However its seems equally possible that the burnt destruction layer is a result of the 749 earthquake that caused so much devastation in Baysan. Above the destruction layer there is evidence for substantial reconstruction, for example in several areas a large wall, two metres wide, was erected with foundations cut through the burnt destruction layer. The excavators interpret this as a city wall which was built after the Byzantine period. If the destruction layer is dated to the 749 earthquake then the city wall must belong to the Abbasid period indicating that the city remained important well into the Islamic period.

The published evidence for post-Byzantine occupation is very patchy and generally the dating seems to be on the basis of the appearance of a feature or structure rather than any independent criteria. For example a recent report states 'In the upper stratum, near the surface, were several walls of poor quality; these remains belong to the final phase of construction, ascribed to the Umayyad period' (Weiss 1999, 22*).

In any case the picture of decline during the 'Arab period' which is presented in the excavations reports is not matched by the finds from the site which includes Umayyad coinage. For example a recent report states that glass continued to be used for windows, gaming pieces, bracelets and vessels during the early Islamic period. The report also notes that glass produced during the Islamic period had a more greenish tint than during the Byzantine period perhaps indicating a change in technology as observed elsewhere in the Islamic world (Fischer and McCray 1999, 897-7)[12].

The same article also gives some clues why so few remains from the Arab period noted in the published reports ' When entering the Arab periods, the information available to contextualize the artefacts is much more sparse. This is due in part to the nature of site deposition and formation processes and partly to the lack of adequate written sources' (Fischer and McCray 1999, 897-7). The reference to site deposition and formation processes may be an oblique reference to the fact that the extensive village of Saffuriyya which existed on the site until the 1940s was demolished thus disturbing the upper levels of the site.

Conclusion

It is likely that the decline of Sepphoris was a continuous process originating with the 363 AD earthquake and reinforced by the increased importance of nearby Nazareth during the Byzantine period. However, the archaeological evidence demonstrates that the settlement continued to function as a city in the early Islamic period and even retained its original street plan[13]. The fact that

[12] Another indication that Sepphoris may have continued to be an important town before the arrival of the Crusaders is a seventh century jug found at Hammath Tiberias that has an inscription which refers to a Jewish community in Sepphoris (Dothan and Johnson 2000, 103).

[13] 'The street system seems to have remained partially in use during those centuries, though at a reduced level of maintenance' (Weis and Netzer 1995, 43).

archaeological investigation has failed to form a coherent picture of the site during this period is probably a result of disturbed levels and the fact that the interests of the excavators has been elsewhere.

Tiberias/ Tabariyya (Appendix 1, Table 3)

History

The city was founded by Herod Antipas in c.18 AD in honour of his patron the Roman emperor Tiberias. The new city was laid out on a classical orthogonal plan slightly modified to fit the narrow coastal plain. Notable buildings in the city included a stadium, a royal palace and a great synagogue. In 100 AD the city was annexed to the Roman empire becoming a colony during the reign of the Emperor Elagabalus (AD 218-222). The status of the city was improved at this time when the Jewish Patriarchate and Sanhedrin were transferred here from Sepphoris. The city remained the pre-eminent Jewish centre in Palestine under the Byzantines until the Muslim conquest when Jews were allowed to return to Jerusalem (cf Gill 1992, 284-297).

In 635 AD the inhabitants of the city surrendered to the Muslims led by Shurahbil ibn Hasana. Under the terms of the peace (sulh) the inhabitants were guaranteed their security and ownership of half of their houses and churches. The residents of the city were also obliged to hand over a proportion of their crops to the new rulers as wel as paying a dinar for each of their animals. The agreement also stipulated that Shurahbil ibn Hasana was allowed to reserve for himself the land for a mosque to be established. The agreement was apparently broken during the time of 'Uthman though it was later re-instated under pressure from 'Amr ibn al-'As (cf al Baladhuri ed de Goeje, 116). Under the new rulers Tiberias was established as capital of the new Muslim province of Jund al-'Urdunn which was more or less contiguous with the former Byzantine province of Palaestina Secunda thus replacing Scythopolis (Baysan) as regional capital.

The population of the city was a mixture of Jews (both of Babylon and Jerusalem), Muslims (both tribal Arabs and converts *mawali*) and Christians (Gill 1992, 284). Tiberias remained a prominent centre of Jewish life throughout the early Islamic period and was the seat of the *Yeshiv* (institute for higher learning). Likewise the city was home to a number of notable Muslim scholars during the Umayyad and Abbasid periods (Gill 1992, 169-174; 436-8). The Christian presence in the city is demonstrated by the fact that in c.810 AD there was a bishop of Tiberias and five churches (Wilkinson 1997, 138).

The importance and prosperity of the city during the tenth century is confirmed by Muqaddasi who gives the following description:

'Tiberias is the capital of the Jordan Province, and a city in the valley of Kana'an. The place is located between the mountain and the lake. It is narrow and shut in, unhealthy in the summer. Its length is about a *farsakh*, but it is without width. Its market place runs from city gate to city gate and the graveyard is upon the mountain. It has eight hot springs, where no fuel is needed, and numerous basins of hot water. The congregational mosque is large and fine, and stands in the market place. Its floor is laid with pebbles with columns made of stone joined together.'

The importance of the city is confirmed by the fact that it continued to mint coins until the mid-eleventh century (Gill 1992, 367). Muqaddasi mentions various industries including the production of paper (Gill 1992, 344). Nasir-i Khusraw (ed.Scheffer 16-17) and al-Idrisi both mention the production of rush mats in the city, one example of which has survived and is preserved in the Benaki Museum in Athens (Combe 1939, 339). The town also appears to have functioned as a spa town with lepers seeking a cure (Gill 1992, 296).

In 1099 Tiberias was conquered by the Crusaders led by Raymond of Tripoli though it was given as a fief to Tancred. In 1187 the Salah al-Din regained control of the city and burnt it to prevent its recapture by the Crusaders. The town temporarily returned to Crusader control in 1240 before being sacked by the Khawarzmian troops in 1247. It appears that the town did not recover after this attack and in 1325 the Moroccan traveller Ibn Battuta (ed. Defremery and Sanguinetti, I, 132) described it as still in ruins. In the early sixteenth century Tiberias had the status of capital of a *nahiya* within the *liwa* of Safad. The town continued to attract visitors attracted by the hot baths and a *firman* dated 1560 AD describes how 2-3000 people came each year to sample the springs (Heyd 1960, 140-2). Two years later in 1562 the town was given to Joseph Nasi, a Jew of Portuguese origin to promote silk cultivation. A new town wall was built (or the old wall was repaired) and mulberry trees were planted. Although the project failed the Tiberias still had a population of 54 households (i.e approximately 270 people) at the end of the century (Hütteroth and Abdulfattah 1977, 188).

Archaeology

The modern town of Tiberias comprises the area of the Ottoman town enclosed within the wall of Dhahir al-'Umar and various suburbs most of which are located on the hills above. The ancient city stretches for a distance of 1.4 kilometres to the south. South of the ancient city a further area known as Hammath Tiberias developed around the ancient thermal springs (see **Fig. 42**).

Hammath Tiberias

Serious archaeological work began in the 1920s under the direction of Slouschz who conducted an excavation of a synagogue in Hammath Tiberias immediately to the north of the city walls (Slouschz 1925 and Harrison 1992, 53-4 for full references). The synagogue was dated to the 4th and 5th centuries AD though an Arabic/Jewish tombstone

Table 19. Tiberias/ Tabariyya Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (112.5 ha.)	A (124 ha.)	A (8 ha.)		
Fortifications	A	A	A		H
Religious buildings	A (churches & synagogues)	A (churches & synagogues) H (mosque)	A (church)		
Secular public buildings	A (bathouses)	A (bathouses)			
Commercial buildings	A	A			
Industrial activity	A	A			

A= Archaeological Evidence, H= Historical Evidence

dated to 979 AD and found during the excavations indicates continued activity in the synagogue in the Islamic period (cf references to Jewish lepers in this area in Gill 1992, 296). Approximately forty years later another synagogue was discovered in the area which also appears to have remained in use until the Abbasid period (Dothan 1978; Dothan and Johnson 2000). Immediately to the west of the synagogue discovered by Slouschz a large building of Umayyad date was excavated by Oren in 1970. The building consisted of nine rooms including one which appears to have functioned as a workshop for glazing ceramics (Oren 1971). Further evidence of pottery production in the area was revealed in a rescue excavation next to the Sea of Galilee which uncovered a kiln that functioned between the ninth and tenth centuries AD (Damati 1993, 112).

Further north, outside the southern gate of the Roman/Byzantine city Foerster excavated a series of seven large buildings dated to the Late Byzantine or Early Islamic period.

The Area of the Roman-Byzantine Town

The Roman city comprised a cardo running approximately North-South with free-standing monumental gates at either end. Significant remains of the Roman period include large villa complex and a theatre on the slopes of Mount Berenice (Hirschfeld; 1992b, 96-7; 1997, 204). There appears to have been significant continuity of plan in the following centuries with the Roman grid pattern of streets continued until the end of the Fatimid period (Hirschfeld 1991, 107).

In the Byzantine period (sixth century AD) the city was enclosed within a wall that included the earlier free standing Roman gates. The wall also had some new gates such as that located to the west on Mount Berenice (Hirschfeld 1992, 96 and 95 Fig.98). Excavations in the central section of the cardo revealed a large bathhouse that was built in the fourth century but remained in continuous use until the eleventh century. The same excavations also revealed a vaulted market place built in the sixth century that also continued in use into the Islamic period (Hirschfeld 1997, 204). More recently a side street from the Fatimid period (969-1099 AD) has been excavated which included two courtyard houses and a triangular building which appears to have been a metalwork shop (Hirschfeld and Gutfield 2000, 15-17).

Evidence for religious life in the early Islamic period is provided by a church a synagogue and a large public building interpreted as the Great Jewish Academy. The church, located on the summit of Mount Berenice next to the city wall, was originally established in the sixth century (after the city wall?). After the earthquake of 749 AD the church was rebuilt and remained in use until the eleventh century when it appears to have been abandoned before being converted for domestic occupation. The synagogue, located in the north of the city, was built in the sixth century and remained in use until the earthquake of 749 when it was rebuilt and finally abandoned some time before the thirteenth century. The Great Jewish Academy appears to have had an even longer continuity of occupation from the 2nd century AD until the early eleventh century (Hirschfeld 1991, 109).

Crusader and Mamluk period occupation is generally absent from this area with the exception of graves (e.g. Area A in Hirschfeld 1997b) and tombs (eg Sitt Sukaina in Bernie et al 1992).

The Area of the Ottoman Town

Excavations within the Ottoman city have been more limited in extent and number.

One of the objectives of these excavations has been to locate the northern wall of the Byzantine/Roman city. Excavations on the southern section of the Ottoman city walls has indicated that these were built on earlier walls which 'are not later than the Early Arab period' (Feig, 110). Other excavations (not precisely located in the published report but north of the Ottoman walls) have revealed a 50 metre long section of wall dated to the Umayyad period or earlier (Harif 1984).

A few salvage excavations have taken place which have revealed a number of features dating from the early Islamic to Ottoman periods. For example one excavation

in the centre of the Ottoman town revealed a house dated the Fatimid period (Onn, 1992: remains of other periods were also encountered). Other excavations within the old city have revealed the site of the Crusader castle (Razi and Braun 1992) and a church (Harif 1984).

Conclusion

Both the historical and the archaeological evidence indicate a considerable degree of continuity between the Byzantine period and the early Islamic period up until the eleventh century. The precise causes of the decline in the eleventh century and after are not known although the earthquake of 1033 and the growing conflict of the era culminating in the Crusader occupation must have played their part. Indications that the city recovered after the 1033 include coins minted there in the 1040's and letters found in the Cairo Geniza referring to daily life (Gil 1992, 284). In any case the area of town enclosed by walls during the Crusader period appears to have been considerably less than during the Fatimid period (Razi and Braun 1992).

The topography of the early Islamic town has been the subject of a recent study by Harrison who suggests that the area enclosed by the Ottoman walls represents a fortified enclosure or camp (*misr*) added to the north of the Roman/Byzantine city by the Umayyads. This theory is based on the assumption that the plan of the Ottoman city contains a fossilised plan of the Umayyad camp and the fact that archaeology indicated that this area was not occupied before the early Islamic period (Harrison 1992). The few excavations conducted within the area of the Ottoman city have generally confirmed Harrison's theory though it should be pointed out that remains of the Roman period have also been found (eg. Onn 1992). The presence of a few Roman remains are not significant and it is more interesting that the southern walls of the Ottoman city are built on walls built in the early Islamic period. It is to be hoped that further excavations in the future will be able to test the validity of Harrison's theory.

Further support for Harrison's theory is the fact that no mosques have been found within the area of the main city[14] even though a church and synagogues have been located (this may be simply a result of chance as al-Muqadassi describes a mosque in the market place in the centre of the town). The only area where mosques are known is within the Ottoman city. One (Jami al-Bahar) appears to be located on the ruins of the Crusader castle though the other mosque built by Dhahir al-'Umar in the eighteenth century is likely to occupy the site of an earlier mosque. Unfortunately it is unlikely that this can be confirmed by excavations.

[14] The Crusader church excavated by Harif was later converted into a mosque.

10. COASTAL TOWNS

Introduction

Climate and Landscape

The coast of Palestine may be divided into two parts, a northern section reaching from the Carmel hills (Haifa) north into Lebanon and a southern section extending south in a gentle curve from Carmel to the Sinai. The northern section is characterised by a narrow coastal plain bordering on a rocky mountainous terrain to the east whilst the southern section comprises a broad coastal plain which becomes wider and contains an increasing proportion of sand towards the south. Both sections contain calcerous sandstone (*Kurkar*) ridges and deposits of reddish sandy loam (*hamra*). The *kurkar* ridges are generally aligned N-S (i.e. parallel to the coast) and are of increasing age further east. The ridges become more pronounced towards the north as they become both higher and more closely spaced. In several places the ridges are cut by rivers which flood the poorly drained areas between the ridges forming narrow swamps (Hb. *marzeva*) (Goldberg 1998, 49-50).

The coastal area has a fairly uniform Mediterranean climate with an average annual rainfall of 500mm. There is, however some variation with the average increasing further north to over 600mm and decreasing to the south to less than 300mm per year. Two main forms of vegetation are found, various types of grass and shrub on the sand dunes of the south (predominantly *Artemesia monsperma* grasses and *retama raetam* shrubs) and to the north a largely man made (Synanthropic) vegetation on the *hamra* soils containing remnants of earlier woodlands (Danin 1998). The *hamra* soils are generally less fertile than those of the *terra rosa* soils in the foothills of the mountains to the east.

Harbours and anchorages

The coast of Palestine has few natural harbours with the exception of Acre and Haifa. The majority of ports had no good natural harbours and boats would have landed on the beach. In a number of cases ports were established in the lee of a rock outcrop as at 'Athlit, Arsuf, Jaffa, Tantura/Dor. In some cases the conditions were particularly unsuitable thus there are frequent complaints by medieval European pilgrims arriving at Jaffa. The exception to this was the port of Caesarea which was established as a city around an artificially constructed harbour.

Early Islamic Period

The main coastal cities of Palestine (*Jund Filastin*) in the early Islamic comprised Caesarea, Arsuf, Jaffa, Ascalon and Gaza. To these may be added Isdud (Ashdod), Yibna (Yavne), Tantura (Dor). Tyre, Acre and Haifa belonged to the more northerly district of al-Urdunn though in Byzantine times they had been part of the province of Phonecia. The catalogue refers only to the cities in Filastin (excluding Gaza) though Acre and Haifa will also be considered in this discussion.

Historical information about the coastal cities of Palestine in the early Islamic period is patchy though it does provide some evidence that they were part of a wider system of coastal defence (for a review of the historical evidence see El'ad 1982). In the Umayyad period it appears that the coastal cities of the whole of Syria-Palestine may have been under a unified command, thus in 638 Abdallah b al-Qays was appointed as 'Governor over the Sea' (El'ad 1982, 147; al-Tabari ed. Guidi, 2824). However it is not clear whether this designation referred simply to naval actions or also the cities on the coast. In any case the coastal cities certainly appeared to have had a special status in the early Islamic period and were counted as border cities (*ribatat*) because of the possibility of Byzantine raids. During the revolt of Ibn al-Zubayr in the late seventh century Caesarea, and perhaps some of the other coastal cities, were again under Byzantine control (El'ad 1982, 151,; Tabari ed. Guidi 821). The importance of the coastal cities was confirmed under the Abbasid caliphs when al-Mansur raised the allowances of the people living in the coastal region (*ahl al-Sahil*) presumably as an incentive to keep the area occupied (al-Razi cited in El'ad 1982, 151-2). The Abbasids also appear to have continued the practice of having a governor of all the coastal cities of Syria-Palestine thus, in 806 Harun al-Rashid appointed Humayd ibn al-Ma'yuf over all the coastal cities (El'ad 1982, 151; Tabari ed. Guidi 709). In the tenth century the Muslims appear to have reversed the situation and began to make attacks on the Byzantines. To this end Ahmad ibn Tulun embarked on an ambitious project to build a new port at Acre and the coastal ports of Palestine supplied ships for naval raids on Byzantium (**Fig. 44**). The new aggressive naval policy appears to have been continued and developed under the Fatimids. The Fatimid conquest of Egypt had partially been achieved through naval power and the priority which they attached to an aggressive coastal policy can be seen from their development of the coastal cities of Mahdiya (Lezine 1965) and Ajdabiyya (Donaldson 1976; Whitehouse 1972; 1973) in North Africa. When the rest of Palestine was subjected to internal conflict involving Bedouin, Qarmatian and Turkish forces the coastal cities remained relatively secure. Evidence of the Fatimid concern for coastal defences is contained in the account of William of Tyre who states that the Fatimid caliph al-Mustansir ordered each [city] to rebuild its walls and raise strong towers round about' (William of Tyre trans. Babcock and Krey, I, 17 405). To summarise the historical sources, the hold on the coastal cities during the Umayyad period appears to have been fairly tenuous, a situation which

was stabilised during the Abbasid period and reversed under the Fatimids when the coastal cities were the only safe places.

The archaeological evidence provides confirmation of the historical information outlined above and also suggests a reduction in the number of coastal settlements during the period. For example one of the smaller coastal towns, Dor/Tantura, appears to have ceased being occupied shortly after the Muslim conquest though the evidence is not decisive. The archaeology of the other small towns such as Mahuz Azdud (Minat al-Qala'a / Ashdod Yam) and Minat Rubin/ Mahuz Yubna (Yavne Yam) is in need of further investigation though there is some evidence that the port of Yibna was abandoned before the Muslim conquest. The extensive remains of the port city at Ashdod have not been systematically investigated though the presence of an early Muslim fort and an early bathhouse indicate that the port was functioning. The one small city for which there is reasonable archaeological evidence is Arsuf, located to the north of Jaffa. It appears that the city contracted from a dispersed settlement of 24 hectares in the Byzantine period to an area of 8 hectares enclosed by a wall in the Umayyad period. Despite its contraction in size the commercial life of the city remained active as indicated by a market street which continued in use with modifications from the seventh to the eleventh century. Unfortunately the archaeology of the neighbouring city of Jaffa is virtually unknown for this period because much of the area is covered with later development. Historical sources indicate that it was a small town which acted as the port for Ramla fulfilling the same role that Mahuz Azdud (Ashdod Yam) and Minat Rubin / Mahuz Yubna (Yavne Yam) did for Ashdod and Yibna.

The archaeology of Caesarea is much better known due to extensive excavations carried out since 1940. There appears to have been some continuity of occupation from the Byzantine to the Umayyad period though there were significant changes. At some point the old city walls were abandoned (possibly after the Byzantine conquest of the 680s) and in the Umayyad period the theatre was converted into a fortified citadel (Porat 2000, 39*). At a later date a new circuit of walls was built enclosing a smaller area around the harbour. Unfortunately the precise chronology of both these events is unknown though there are some indications that the new walls were built in the tenth century. If this date is accepted either the city was un-walled for a period or the outer city walls continued in use beyond the Umayyad period. In either case it is clear that as in Arsuf the defended area of the town contracted while the area outside was used as irrigated gardens. The other notable feature of Caesarea's archaeology in the Islamic period is the construction of a new quarter in the mid-eighth century (i.e. beginning of the Abbasid period). The new quarter was built at a time when the inner harbour was deepened perhaps suggesting a new military initiative on behalf of the Abbasid governor.

Historical accounts indicate that Ascalon was the most important of the coastal cities. Unfortunately archaeologists working on the site have been primarily concerned with earlier periods and very little is known of the Islamic period. The strong city fortifications pre-date the Islamic period and may account for the fact that this was the last city in Palestine to be captured by the Muslims. Some forty years later the city was recaptured by the Byzantines who destroyed the walls obviously aware of their strategic value. Archaeological evidence for the construction of the walls is patchy and, despite a number of attempts, no systematic survey of the medieval fortifications has ever been carried out. There is some evidence of a rebuilding of the walls in the Fatimid period in the form of two inscriptions, one located above the north gates and the other on the talus of the same tower (Sharon 1995). The interior of the city is also largely unknown for this period though the discovery of Fatimid gold jewellery and luxurious courtyard houses provides some support for accounts of prosperity under the Fatimids.

Although extremely limited the archaeology of the coastal cities supports the historical evidence. A survey of rural settlement in one section of the coast (the central Sharon) provides a slightly different perspective of the area during the early Islamic period. Under Byzantine rule the western part of the coastal plain was densely populated with more than 30 settlements despite the fact that it was covered in less fertile *hamra* soils which together with the constant need for drainage meant that for most periods it was a marginal area. By the time of the Crusades (i.e. twelfth century) the number of settlements had been reduced to 12 for the same area (Pringle 1986, 5-27). If this pattern is replicated over the whole coastal plain it would indicate a reduction in rural settlement by over 50%. The survey results complement the information from the towns and may explain why areas of Caesarea were converted to agricultural allotments. The author of the survey suggests three reasons for the contraction of settlement 1) loss of wider Mediterranean markets for produce, 2) warfare and 3) a decline in the road system (Pringle 1986, 7-8). In the light of the historical information and the archaeology of the towns I would suggests that the second reason- the warfare between the Byzantines and the Muslims was the most significant factor. Warfare would have reduced the number of rural coastal settlements both directly through raiding and secondarily by reducing the urban population of the area reducing the need for food produced in the area. For example the enclosed area of Caesarea was reduced by 86% between the Byzantine and Fatimid periods indicating a severe population decline even if it is assumed that the population density in the town increased.

Crusader Period

The Crusaders were dependant on Europe for much of their trade as well as their manpower and consequently placed a great emphasis on the coastal towns as their link

with the west (**Fig. 45**). The most visible reminder of this is the development of Acre as capital of the Kingdom between AD 1191 and 1291 when the walled area was expanded from 51.5 hectares to 85.5 hectares. Equally significant is the fact that the Crusaders intensified the urbanisation of the coast creating at least two new towns, Darum and 'Athlit, and reviving older towns such as Tantura which had fallen out of use in the early Islamic period. When faced with massive fortifications such as the castle of 'Athlit it is tempting to see the coastal towns as primarily military in character however they were evidently of great commercial importance to both Muslims and Christians as can be seen from Ibn Jubayr's account of his caravan journey from Damascus to Acre in 1185 (Ibn Jubayr trans.Gaudfrey-Demombynes 352-2). It is probable that there was also a rise in rural settlement on the coast during this period in response to the growth of the towns although this has not been documented archaeologicaly.

Mamluk Period

One of the defining features of Mamluk policy was the destruction of the coastal cities of Palestine and Syria to prevent their recapture by the Crusaders (**Fig. 46**). Commenting on this policy Ayalon wrote '... throughout the history of Islam. Nowhere else in the Muslim world, from the Atlantic to the Pacific Ocean, was there destruction to equal in thoroughness, scale and gravity of its lasting consequences, the destruction of this coast by the Mamluks' (1965, 12). According to this policy the coastal cities were destroyed one by one thus the city of Ascalon was destroyed and has remained deserted to the present day. Similarly Jaffa was destroyed with the Mamluk Sultan taking a personal part in the destruction. A large quantity of architectural material was removed from Acre to Cairo including a church doorway which was used for the Jami' al-Nasir (Behrens Abou-Seif 1989, 18). In place of the destroyed cities a series of fortified towers were built to keep watch over the coast, a number of which still survive at Tripoli (see Jidejian 1980, 94-95). In order to inhibit the return of settled life to the area the Mamluks settled the coastal areas with nomadic Turkomans who would also act as a first line of defence against further Crusader attacks (Ayalon 1951, 89; 1965, 7-12).

The efficacy of this policy has been taken for granted by historians who see the coast of Palestine as devoid of settled life throughout the Mamluk period. There are however a few exceptions to this policy the most notable of these is the city of Gaza which, not only survived but, prospered[1]. There are other examples of continued urban life on the coast north of Palestine, thus the city of Tripoli was rebuilt two miles inland from the sea and continued to function as one of the main urban centres of Syria (Salam-Liebich 1983). Further south, Beirut was rebuilt after its initial conquest and destruction by the Mamluks in 1291. Recent historical research has shown that the city not only continued to exist but was also, at least partially, refortified during this period (Fuess 1997-8). The preliminary results of the Beirut archaeological excavations have confirmed the town's continued existence into the Mamluk period with a significant proportion of the medieval town plan recorded. (El-Masri 1997-8). Ceramics from the excavations also indicate increased activity in the Mamluk period compared with the preceding Crusader period[2]. Beirut's survival is attributed primarily to its role as the port for Damascus and the fact that it was separated from the capital by high mountains must have played some part in the decision to allow its continued existence.

The relationship between Beirut and Damascus is echoed in the relationship between Jaffa and Jerusalem and it is tempting to see similar signs of continuity here. There is for example some historical evidence indicating that, at least initially, Jaffa continued to function as a port and may even have begun to recover in the fourteenth century (Abu al-Fida ed. Reinaud de Slane, 239). The revival of the port evidently angered the Mamluk government who in 1336 once more demolished the city and filled in the harbour (Tolkowsky 1924, 133). Unfortunately the archaeology of medieval Jaffa has been largely neglected so that it is not possible to reach positive conclusions about its condition in this period though the construction of Qubbat Shaykh Murad in 736 AH (1335AD) indicates that there was some activity in the area before 1336 (Clermont-Ganneau 1886-9, II, 152-154). Similarly Kana'an has identified pieces of masonry built into the exterior of the Great Mosque which appear to be derived from an earlier Mamluk structure in the vicinity (Kana'an 2001, 194 and 203 n.7).

Bearing in mind these few exceptions it appears that most of the towns and cities immediately on the coast were destroyed. Confirmation of the desertion of the coastal area is again provided by Pringle's survey of the central Sharon plain which shows progressive abandonment of the areas west of the Via Maris (1986, 22-27 and Tables 1 and 2). However a few kilometres inland some settlements appear to have flourished during this period due to another Mamluk policy, the revival of the Via Maris. Gaza was one obvious beneficiary of this policy though other towns such as Yibna, Isdud and Qaqun also flourished. Again we are hampered by the lack of published archaeological research though the standing remains at Yibna including a Friday Mosque, a magnificent shrine tomb and a bridge indicate some form

[1] The survival of Gaza may be attributed to two factors, (i) its proximity to Egypt and the Via Maris and (ii) the fact that it is located three kilometres form the coast and is not actually a port city.

[2] See for example Van der Steen 1997-8, pp. 122-3 'Sgraffiato is a kind of decoration usually found in Ayyubid and Crusader contexts. It is rather rare in Mamluk contexts. Sgraffiato cut with a broad instrument, in particular, is considered pre-Mamluk. A few sherds of this type were found. Polychrome glazing, so called splashware, is usually found in pre-Mamluk contexts, in the Ayyubid and crusader periods. It was present in small quantities in all the Islamic phases. On the other hand, underglazed painted fritware was found in relatively large quantities, especially so-called Syrian blue and white painted ware.

of urban development. Similarly at Isdud/ Ashdod the remains of a large khan, two medieval shrines and a bridge indicate something more than a village. Unfortunately excavations at the site primarily concerned with earlier periods found that the later levels of the site were too disturbed by modern destruction to give any assessment of occupation in the medieval period (Dothan and Freedman 1967, 13).

In addition to these two settlements which evidently existed before Mamluk times another settlement, Majdal, appears to be a creation of the Mamluk period (i.e there is no evidence of an earlier settlement on the site). Standing remains include a large Friday Mosque built on the orders of Sayf al-Din Salar in 1300, a smaller mosque and a market place. The importance of the site can be judged by the fact that the population of Majdal was nearly twice that of Ramla in the early sixteenth century (Cohen and Lewis 1978, 19 see also Appendix 1, Nos 9 and 10). The location of the settlement near the ruins of Ascalon suggest that it was built or developed to carry-out some of the functions formerly exercised by that city.

One notable feature of the surviving settlements on or near the coast is that they are all in the southern part of the country. At a latitude roughly equivalent with Jaffa the Via Maris shifted eastwards following a route along the foothills of the Judean Mountains via Jaljuliyya (this village also shows signs of proto urban development with its large khan and two mosques Petersen 1997). The northern part of the coastal plain therefore appears to have been genuinely free of towns and villages with the possible exception of Qaqun. Although Qaqun seems to have fulfilled many of the functions of a town with its khan and Friday Mosque it appears to have been principally a military base for controlling the coastal plain and did not develop into a town in the same way as Safed. It is for example noticeable that Qaqun was not surrounded by villages as one might expect of a more prosperous town but instead was located in the midst of an area inhabited by nomads[3].

The Ottoman Period

With the defeat of the Mamluks and the rise of a new empire which placed more reliance on naval power one might expect to see the re-development of the coastal towns (cf Ayalon 1965). However for the first century of Ottoman rule there is little evidence of activity in the coastal region probably because the emphasis of Ottoman transport and communication was based on the Damascus Hajj route[4]. Much of the coast was still dominated by nomadic Turkoman tribes and although there were attempts to restore settled life to this area it remained devoid of villages throughout the sixteenth century[5]. There is however some evidence of urban renewal of the coastal towns in Lebanon (see **Appendix 1, Tables 1** and 2). However much of this seems to have been a result of local initiative rather than direct Ottoman policy thus the renovation of Sidon appears to have been mostly carried out under the direction of the Emir Fakhr al-Din II al-Ma'ani (AD 1572-1635) rather than as a result of direct Ottoman patronage (Badawi 1997-8 525-62). However in Palestine Gaza remained the only Palestinian coastal town with a significant population (roughly equivalent to that of Jerusalem during the same period). The only other coastal town where significant Ottoman interest can be demonstrated is Acre where a new mosque built by Sinan Pasha formed the centre of a complex which included a khan and madrassa (Bakhit 1982, 118)[6]. Nevertheless the population of the port remained fairly low (in 1597 approximately 405) and was equivalent to that of a large village. However the revenue of the town was very high (20,500 *akçes*) in proportion to the population giving an average revenue of 50.6 *akçes* per person (compare this with the revenues listed in Appendix 1, Tables 10 and 12).

Arsuf /Apollonia

History

The ruins of Arsuf are located on the coast roughly mid-way between Caesarea and Jaffa (Palestine Grid 131 178). The principal surviving remains are the Crusader castle which is located in the north-west of the town site (see **Fig. 50** and Plates **28-30**). Not much is known of the history of the town before the Crusader period. In Roman times the town housed the sanctuary of Apollon-Reshef and was the only port of the southern Sharon region (Roll and Ayalon 1987, 61). During the Byzantine period the town was known as 'City of the Saviour' (GRP 30) and was an Episcopal see. In 614 the town surrendered to the Sassanians (Schick 1995, 250). There is no account of the Muslim conquest of the town though it is mentioned by Muqaddasi in the tenth century who said that it was smaller than Jaffa but nevertheless well fortified and populous. Muqaddasi also mentions the Friday mosque and describes the Friday mosque which has a *minbar* originally made for the mosque in Ramla but was regarded as too small and later moved to Arsuf (ed de Goeje, 177). There is little indication of the presence of Christians in the town though it is clear that Samaritans were there until the ninth century at least when their synagogue was burnt as part of a widespread series of rebellions (Gil 1992, 410, 941). In 1101 the city was captured by the Crusaders and remained under Christian control (with the exception of four years between 1187 and 1191) until 1265 when it was systematically destroyed by the Mamluk sultan Baybars (Pringle 1993, I, 59; Gil 1992, 944).

[3] This area (i.e. the coast between Jaffa and Haifa) was still underdeveloped at the start of the twentieth century.

[4] For the importance of the Hajj route in the early Ottoman period see Bakhit 1982, 106-115.

[5] A *firman* dated AD 1589 encouraged the development of settled populations in the region of Qaqun (Heyd 1960, 53-3).

[6] Unfortunately the Sinan Pasha mosque was rebuilt in the eighteenth century and the other buildings have not been identified so that it is difficult to from an impression of the development of Acre during this period.

Table 20. Arsuf /Apollonia Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (24 ha.)	A (24-8ha.)	A (8 ha.)		
Fortifications		A	A		
Religious buildings	A (church)	H (mosque)	A?		
Secular public buildings	A				
Commercial buildings	A	A			
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence.

Archaeology

The archaeological investigation of the site has mostly been carried out during the last twenty years first by the Israel Antiquities Authority and later by the University of Tel Aviv (Dauphin 1998,799; Ayalon and Roll 1987). The Byzantine town was a dispersed unfortified settlement covering an area of up to 70 acres. During the Umayyad period the size of the settlement was reduced by a third from 15 to 5 hectares and defended by a newly constructed wall (**Fig. 50, Plate 29**). To the south of the town there is a Muslim shrine which was endowed by the Mamluk Sultan Baybars after his conquest of Arsuf in 1265 (Mujir al-Din trans Sauvaire 212-3; for description of shrine see Mayer and Pinkerfeld 1950, 36-9 and Petersen 2001, 146-8).

Walls

The walls enclosing Arsuf are built of *kurkar* stone with regular square buttresses and at least four gates. Recent excavations have shown that the walls were built either on sand dunes or on well packed *hamra* with crushed *kurkar* rubble. The walls were originally constructed during the Umayyad period and remained in use until the arrival of the crusaders who renovated them for their own use (Roll 1990; Roll 2000).

Market Street

The most interesting results have come from the investigation of a shopping street (suq) running North-West to South-East. The excavations show that the suq continued in use for a period of three hundred and fifty years from the mid-seventh to late eleventh century. Three main phases of construction were identified in the report (named V to VII). The layout of the street and shops was established in the earliest phase attributed to the Umayyad period. At the end of the second phase (Stratum V), attributed to the early ninth century, there was considerable evidence of destruction which the excavators linked to the disturbances of that period which also saw the burning of the Samaritan synagogue in the town (see above). In the latest phase (Stratum V) the street was renovated with a new paving and curb-stones and the shops were renovated. Because this was the latest phase and consequently well preserved more details of construction were observed. Thus it is evident that the shops were built of mud brick on a stone (*kurkar*) base and covered with plaster.

Castle

The most visible remains are those of the Crusader castle located at the north west corner of the site. The remains comprise an irregular concentric plan with projecting towers. Immediately in front of the castle are the ruins of a harbour (**Fig. 50, Plate 28**).

Conclusion

Although only a small proportion of the site has been excavated the results clearly indicate that the town was re-built as a planned settlement in Umayyad times. The town retained this plan until the Crusader conquest in the twelfth century. Like the other coastal cities there is no evidence of rebuilding in either the Mamluk or early Ottoman periods.

Ascalon/Asqalan

History

The remains of Ascalon are located on the coast between Ashdod and Gaza (Palestine Grid 1068 1168). Although the area around the ancient walled city has recently been developed the ruins have been protected since the period of the British Mandate.

Ascalon is an ancient city which is first mentioned in Egyptian texts of the twentieth century BC. The city remained one of the major urban centres of Palestine until its final destruction by Sultan Baybars in 1270 AD. During Roman times Ascalon was a walled city with a harbour, palace, baths and a Herodian portico. There were three temples dedicated to Apollo, Atargatis and Isis (*GPR* 32; *TIR* 68-70). In the Byzantine period there were at least three churches and one or more synagogues (Schick 1995, 251).

Ascalon was the last city in Palestine to be conquered by the Muslim Arabs. After a short siege the city surrendered to Mu'awiya in 640 AD though it had previously been occupied by 'Amr ibn al-'As for the conquest of Egypt (cf Baladhuri ed De Goeje 142 and Tabari ed.Guidi I, 2516). It was designated as a border settlement and garrisoned with frontier troops. The political instability of the caliphate in the 680's meant that the Byzantines were able to recapture the city, although instead of occupying it they exiled the inhabitants and destroyed the fortifications. A decade later under 'Abd al-Malik ibn Marwan the Muslims were able to re-establish control over the coast. As part of this process both Ascalon and Caesarea were re-fortified and a new mosque was built in Ascalon (Baladhuri cited in Le Strange 1890, 400). By AD 712 Ascalon had begun minting its own copper coins indicating that it was considered safe from attack. During this period a number of prominent Muslims lived in the city (Gil 1992, 172-4). Under the Abbasids the city continued to flourish as is indicated by an inscription recording the re-building of the mosque with minaret by the caliph al-Mahdi in AD 772 (*RCEA*, I, No. 42). In AD 969 Palestine and much of Syria was conquered by the Fatimid general Jawhar and Ascalon became a strategic base linking the two areas.

At the end of the tenth century Muqaddasi visited Ascalon and gave the following description:

'Ascalon on the sea is a splendid city and well defended. Fruit is here in plenty, especially that of the sycamore. The great mosque, in the market of the cotton merchants, is paved throughout with marble. The city is beautiful, superior, and well fortified. They make the finest silk, and other resources abound, and life there is pleasant. Also its markets are good and well defended. Only its harbour is unsafe, its waters brackish, and the sand-fly are a nuisance' (Le Strange 1890, 401).

It is notable that Muqaddasi makes several (three) references to the strength of the city. The security of the city was evidently a positive factor thus a letter from the Cairo Geniza states the desire of a man to move to Ascalon ' because it is better fortified and maintained than Hasor [Caesarea]' (Gil 1992, 330).

During the eleventh century the city suffered from a number of natural and man made disasters. In 1033 Ascalon, along with many of the other cities in Palestine suffered from an earthquake which caused the *minara* above the mosque to collapse. In the 1070s most of Palestine was captured by the Seljuk Turks though the Fatimids were able to retain control of Ascalon because of its fortifications and proximity to Egypt . In 1099 the arrival of the Crusaders was a new threat though Ascalon was able to resist capture for over half a century until 1153.

The Crusaders were only able to seize the city after a sustained campaign involving the construction of three fortresses. The Crusaders were only able to hold the city until 1187 when it was captured [illegible]-Din. In 1192 the site was briefly captured and [illegible] by Richard I of England though later in [illegible] years the fortifications were dismantled after a treaty between Salah al-Din and Richard. In 1240 Richard of Cornwall re-occupied the site and established a castle in the north-west corner. In 1247 the castle was captured by the Ayyubid Fakh al-Din ibn al-Shaykh. The final destruction of the fortifications took place in 1270 as part of Baybars policy of destroying the coastal cities. The city never recovered although the site was settled by farmers.

The population of Ascalon during the early Islamic period (i.e. up to the Crusader conquest) appears to have been mixed comprising Christians, Jews and Muslims (Gil 1992, 172-6, 276). It is likely that the proportion of Muslims increased in the latter centuries and it is known that by the time of the Crusader conquest there were at least three mosques in the city. Conversion to Islam and the occasional persecution (Gil 1992, 708 and 711) may have reduced the proportion of Christians in the city though Jews appear to have remained in the city until the Crusader conquest (Gil 1992, 857).

Archaeology

Despite the considerable size of the site and large quantity of material from the later periods the archaeology of Islamic period Ascalon is not well understood. This is partly because large-scale excavations at the site have mostly been concerned with remains of the Biblical period (see for example Stager 1991). The other problem is identifying particular buildings or periods of construction known from historical sources (see **Fig. 47**).

The problem of identification is particularly acute when the surviving 1.2 kilometres of city fortifications are considered. The main question is the extent to which Fatimid period fortifications were rebuilt by the Crusaders (and Richard of Cornwall). Some have argued that Richard I of England refortified the entire circuit of the walls (Pringle 1984) other that the walls were entirely rebuilt by Richard of Cornwall (Sharon 1995, 73) and others that the surviving walls are of Fatimid construction (Stager 1991, 62 n. 36). In any case it is clear from William of Tyre's description and an inscription recently unearthed (Sharon 1995) that the Fatimid fortifications were monumental and probably included an outer ring of defences that have since disappeared.

A similar situation is encountered when one considers the mosques and other pre-Crusader religious buildings in the town. Although there are several descriptions of mosques in the town no remains have been located with the possible exception of a Byzantine Orthodox church uncovered in 1985 abutting the eastern section of the town wall. The church continued in use through most of the Islamic period until the mid-tenth century when it was converted into a mosque (unfortunately the excavator does not say what archaeological evidence there is for the

Table 21. Ascalon Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (60 ha.)	A (60 ha.)	A (6o ha.)		
Fortifications	A	A	A		
Religious buildings	A (churches)	H (mosques)	A (church)		
Secular public buildings	A	A	A		
Commercial buildings	A	A	A		
Industrial activity	A	A	A		

A= Archaeological Evidence, H = Historical Evidence

conversion). After the Crusader conquest the church was re-converted for use as a church[7].

Archaeological evidence for other aspects of life in the city during the Islamic period has generally either not been published or not has not been found. There are a few exceptions, thus ornate gold jewellery (Stager 1991, 54) and carved bonework (Wapnish 1991) may be evidence of the many industries which we know were carried out during the Islamic period (see for example Gil 1992, 342, 345 and 350). There are brief references to courtyard houses along the side of a street each with a small pool in the centre of the courtyard (Stager 1991, 54; Stager and Esse 1987). There is also evidence of a large apsed structure built in the sixth century which continued in use until the twelfth century. The function of the apsed building is not known though it position above an earlier Byzantine bathhouse suggest that it may also have functioned as a bathhouse (Stager 1991, 49; Stager and Esse 1987, 6).

Conclusion

The available historical evidence clearly indicates that Ascalon was one of the main cities of Palestine. Unfortunately the published archaeological evidence does not add much to the historical accounts beyond confirming its status.

Ashdod, Isdud

The site of the Biblical Ashdod represented by Tell Ashdod/Tell Isdud is located approximately four kilometres from the coast between Ascalon and Jaffa (Palestine Grid 118 129). Until 1948 the site was occupied by the Arab village of Isdud.

History

There was a settlement on the site of Isdud from at least the seventeenth century BC. The town was destroyed in the second century BC but was rebuilt by the Romans as Azotus Hippenos less than one hundred years later. In the fourth century AD the city became and Episcopal see (*TIR*, 72). During the Byzantine period the port became more important than the city itself (see Minat al-Qal'a). In the early seventh century the site was captured by the Muslim Arabs though it is not specifically mentioned. In the ninth century the town was mentioned as a stop between Gaza and Ramla (Ibn Khurdadhbih, 80) and in the tenth century Muqaddasi (ed. de Goeje 192) describes it as a stop midway between Ramla and Jaffa. After the destruction of coastal towns by Baybars in the thirteenth century the centre of activity shifted back from the port to the main site. In 1477 the Mamluk Sultan Qaytbay passed through the village on his way from Cairo to Damascus (ibn al-Ji'an cited in Hartmann 1910, 696). According to the 1596 tax registers the settlement was classed as a village with a population of 75 households (approximately 375 people) (Hütteroth and Abdulfattah 1977, 143).

Archaeology

The tell which forms the centre of the site rises approximately 22 metres above the level of the surrounding plain. The main archaeological investigation of the site was carried out by Dothan during the 1960s and was mainly concerned with the pre-Roman periods. In general Dothan suggested that Ashdod was in decline before the Muslim conquests and that by the time of the early Islamic period it was little more than a village (Dothan and Freedman 1967, 13, 27-35). However more recent excavations have indicated that the post Roman settlement was more substantial than previously indicated by Dothan (Baumgarten 1999). Thus a synagogue appears to have been built during the Byzantine period and there are signs of significant occupation as late as the tenth century AD (see for example the hoard of tenth century Muslim dinars discovered on the site Bacharach 1980). Unfortunately there is little indication of the layout or size of the settlement in early Islamic times because of the considerable disturbance of the later layers of the site (for example Dothan writes 'the dearth of remains that resulted from recent destruction was particularly apparent in the highest levels of the tell' (Dothan and Freedman 1967, 32)).

[7] According to Stager this church should probably be identified with the Green Mosque/ Church of St Mary the Green though he does not give convincing reasons (62, n.38).

Table 22. Ashdod/ Isdud Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size					
Fortifications					
Religious buildings				A(mosque)	A (mosque)
Secular public buildings					
Commercial buildings				A (khan)	A (khan)
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

Medieval occupation at the site is represented by a large khan, a mosque, a smaller domed shrine. The khan that has disappeared since the late nineteenth century was built during the Mamluk period though the exact date of construction is not known (Edhem 1916, 26-7). The mosque was built in 1269 AD and subsequently expanded to accommodate the tomb of Ibrahim Matabouli who died there in 1472 (Dothan 1964). The small domed shrine is undated though its architecture suggests that it was also a medieval construction. In the early Ottoman period the khan continued to function (Hütteroth and Abdulfattah 1977, 94 Fig.9) although the village did not have a market which seems to have taken place in the neighbouring settlement of Majdal (Hütteroth and Abdulfattah 1977, 87 Fig. 8).

Conclusion

Unfortunately the available archaeological information for the early Islamic period is limited though it does suggest that the settlement was in decline before the Muslim conquest. It appears that the port, Minat al-Qal'a was the main urban settlement in the Byzantine and early Islamic times. Given the destruction of the coastal settlements following the Mamluk conquest one might expect Isdud to revive as an urban settlement away from the coast but on the Via Maris (cf Majdal). However although a few medieval buildings survived until recently they do not, on their own, suggest that Isdud was anything more than a village during the Mamluk period.

Caesarea / Qaysariyya

History

Caesarea is located in an area of sand dunes on the Mediterranean coast, roughly mid-way between Jaffa and Haifa (Palestine Grid 1401 2120). Although a trading port had existed at the site from Phoenician times, the city of Caesarea was founded by Herod the Great between 22 and 10 BC (cf. Raban 1998, 59). The newly established city became capital of Syria Palaestina and Palaestina I and later a metropolitan Episcopal see (*TIR* 94-6). The city was taken by the Sassanian Persians in 614 AD and appears to have continued functioning as normal during the occupation (cf Schick 1995, 277). Two decades later the city suffered from the first Muslim attacks and in 634 AD Sergius the military governor of Palestine led an attack on the Muslims with a company of 300 men and was defeated and killed (Gil 1992, 51, 54). Two years later in 636 Caesarea and Jerusalem were the only cities in Palestine to have withstood the Muslim conquest (Gil 1992, 65). The city was finally captured by the Arabs in 19 AH (640 AD) led by Mu'awiyya (Sharon EI, 4, 841-2; Orni *EJ*, 5-6-13). According to al-Baladhuri (ed. de Goeje 142) the Muslims captured 4000 prisoners whilst Christian sources (John of Nikiu and Michael the Syrian) state that the city was devastated (Schick 1995, 278)[8].

Under the Byzantines Palaestina I had been under the administrative control of Caesarea. The Muslim Arabs did not wish to continue this situation as they regarded Caeasarea as too vulnerable to Byzantine sea-borne attacks (Gil 1992, 116). However in the first years of Muslim rule the Byzantine administrators were useful to the conquerors who freed captive Christians and Jews from Caesarea to run the administration (Gil 1992, 270). Although Caeasarea was not regarded as a suitable capital it was still a major port and administrative centre minting its own coins. To this end the city was fortified and was one of a number of coastal cities which maintained a Muslim fleet. In 662/3 Mu'awiyya settled Persian army units from Antioch, Ba'albak and Hims in Caeasarea and the other coastal cities (Gil 1992, 117). According to al-Baladhuri the city was briefly re-captured by the Byzantines between 685 and 695 AD and the mosque was destroyed (ed. de Goeje 143). In general, however the precautions against coastal attacks were effective and it was only when the political system began to fragment in the tenth century that the Byzantines were able to make successful raids such as that in 972 AD (Ibn al-Qalanasi ed. Amedroz, 12: Gil 1992, 550).

Life within the city during the first centuries of Muslim rule appears to have been relatively peaceful with Muslims, Jews and Christians co-existing. There are, for example letters from the Geniza documents testifying to an active Jewish life centred around the synagogue as late as 1094 AD (Gill 1992,747, 913). On the other hand there

[8] Tabari states that over 80,000 Byzantines were killed in the capture of Caesarea (Ed.Guidi 2397, trans Friedman 1992, 183 4).

were occasional acts of intolerance such as the destruction of churches in 923 AD (Gill 1992, 710).

A picture of life in the city in the mid-tenth century is provided by the Palestinian geographer al-Muqaddasi who described it as follows;

'There is no city more beautiful, nor any better filled with good things... its lands are excellent, and its fruits delicious; the town is also famous for its buffalo milk and its bread. The city is protected by a wall. Outside of which is a populous area and a fortress. The water for the occupants is gathered from cisterns. Its Great Mosque is beautiful' (Muqaddasi ed. de Goeje, 174)

In 1047 the city was visited by the Persian traveller, Nasir-i-Khusraw, who gives a similar description emphasising the strength of the fortifications and the iron gates (ed. Scheffer, 18, 61). Apparently the strength of the fortifications was an important consideration in deciding whether to settle in the city (Gill 1992, 330)[9].

In May 1101 the city was captured by the Crusaders led by King Baldwin I. The crusaders held the city until 1187 when it was captured by Salah al-Din. Three years later in 1187 the city defences were destroyed by Salah al-Din in anticipation of the arrival of the Third Crusade. The Franks duly re-took control of the city in 1191 although no attempt was made to rebuild the fortifications until 1217. The re-fortification was finally completed by Louis IX of France in 1252. Thirteen years later in 1265 the city was captured by the Mamluk Sultan Baybars who spent two weeks demolishing the defences (Pringle 1993-, I, 166 and Ibn al-Furat ed Lyons and Lyons, I, 86, II, 70-2). The site remained uninhabited for the rest of the Mamluk and early Ottoman periods until the seventeenth century when a small community was established on the site[10]. This village was also soon deserted and it was not until the late nineteenth century when there was a renewed attempt to settle the site with Bosnian Muslims (**Plate 31**). Neither of these later settlements could be classified as a town.

Archaeology

Because there is no substantial modern settlement on the site of ancient Caesarea the remains are open to extensive excavation both on land and in the sea. The first serious archaeological excavations were carried out in the late 1940's and early 1950's by Reifenberg who was interested in how the town was abandoned (Reifenberg 1950-1). During the following half century a substantial area has been excavated, mostly within the Crusader walls.

The remains comprise a vast semi-circular area (2km N-S x 1.25km E-W) enclosed within a wall and fed by two aqueducts (**Figs.51-2**). In the middle of the west side there is an artificial harbour which today is dominated by the remains of the Crusader castle/stronghold. Opposite the harbour, facing the sea, there is a rectangular area enclosed within walls, which, in their latest phase, date to the reconstruction of King Louis in 1252. A grid plan of streets covers a large proportion of the site (approximately half) and appears to represent the remains of the original Herodian plan as indicated by a fragmentary early wall at the northern end of the site. Outside the grid plan, but within the later Byzantine walls, there are the remains of a theatre, amphitheatre and hippodrome.

It appears that the outer wall enclosing the city was built in the Byzantine period and represents the greatest extent of the city (for evidence of Byzantine occupation of this area see for example the hoard of fourth to fifth century coins , Israel Museum 1997, 17). Apparently the wall was first built in the fourth or fifth century though a Greek inscription found within the hippodrome refers to a tower (presumably of the city wall) built in the sixth century (Dauphin 1998, 744; Lifshitz 1961, 123-6). The wall had both rectangular and round towers and does not appear to have been particularly strong. A recent report on an excavation of the north-east part of the wall states that it had shallow foundations on unstable dune sands and reached a total height of 2.8 metres including a parapet (Holum and Raban 1991, 41). It is not clear when the wall went out of use although the same report states that it was abandoned 'after the Muslim conquest'. Unfortunately there is no information about when 'after the Muslim conquest' the wall was abandoned though it seems likely that this would have not occurred before the Fatimid period (tenth century) when a new wall enclosing a smaller area was built (see below 'Fortifications').

There is little evidence of occupation during the early Islamic period of the area outside the Crusader city walls although it is possible that the excavators in this area failed to recognize early Islamic material because of its similarity to Byzantine remains (cf Lenzen 1983). In some areas excavators identified features which they described as 'Irrigated Gardens' overlying earlier Byzantine remains. The date of the gardens is not known though they comprised soil containing ceramic material dating from the sixth and seventh centuries AD suggesting that they were constructed during the first centuries of Islam (Porath 1998, 45; Patrich 1998, 56). In any case the use of parts of the area as a graveyard from the tenth century onwards may implies that by the tenth century occupation was confined to the areas within the walls (Patrich 1998, 56).

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[9] Apparently the fortifications of Caesarea were not considered sufficient for certain members of the Jewish community in Caesarea thus Joshua ben 'Eli requested permission to move from Caesarea to Ascalon 'for it is better fortified and maintained than Hasor [Caesarea] (Gil 1992, 330).

[10] It is for example notable that Caesarea does not even appear as a village in the sixteenth century tax registers.

Table 23. Caesarea Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (80ha.)	A (80ha.-11.25 ha.)	A (11.25ha.)		
Fortifications	A	A	A		
Religious buildings	A (church)	H (mosque)	A (church)		
Secular public buildings	A	H			
Commercial buildings					
Industrial activity		A			

A= Archaeological Evidence, H= Historical Evidence

Forifications

Recent excavations have confirmed that the walls of the Crusader period are built on earlier walls of the early Islamic period (Porath, Neeman and Badihi 1991, 134). At least part of the early Islamic walls were built on an earlier Herodian wall which may have formed part of the quay of the inner harbour (Porath 1998, 48). In other places the early Islamic wall appears to have rested directly on earlier structures dating from the seventh to ninth centuries giving a date of construction in the Fatimid period (969-1101 AD).

It has also recently been discovered that the theatre area was converted into a fortress during the early Islamic period[11]. The fortress walls which incorporated the theatre were extended westwards to the sea shore forming a fortified enclosure or *ribat* in the southern part of the site. It appears that the fortress was abandoned by the eighth century (Porat 2000, 35* Table 1.IV and 39*)

Harbour

As the harbour at Caesarea was an artificial construction in an area of shifting sand dunes it was susceptible to considerable silting up. In the Herodian, Roman and Byzantine periods there was an inner harbour or basin which was periodically dredged to keep it open. By the time of the arrival of the Crusaders the inner basin was no longer functioning. The exact date of the silting of the inner basin is not known though there is evidence that it was still in use and deepened during the early Islamic period (i.e. late seventh-mid-ninth centuries AD)(Porath 1998, 40). Unfortunately the exact dating of the filling of the inner harbour is not clear though it must have been some time before the new Islamic grid plan was laid out in the eighth century.

Industry

There is considerable evidence for trade and industry in early Islamic Caesarea for example the piazza on top of the Herodian podium was used as an area for melting bronze and iron whilst the vaults below were used as lime kilns (Porath 1998, 47) (for examples of metalwork recovered at Caesarea see Israel Museum 1997, 18). In the new Islamic quarter the excavators identified an installation for processing sugar cane (Raban 1998, 65). Elsewhere there are large vaults which were probably used as warehouses and square compartments or silos with mosaic floors used for storage of wine or olive oil (Netzer 1982, 15; Raban 1986, 20; Porath 1998, 45).

Islamic Residential Quarter

In the mid-eighth century a new residential quarter was built with its own grid plan of paved streets, drains and wells. The plan of the quarter was based on a main north-south street and four east west streets intersecting at right angles The houses were built around central courtyards with a well and continued in use with some modifications for a period of 350 years (Yule & Rowsome 1994; Raban 1998, 64-7).

Crusader Period

The Crusader city occupied the same area as the Fatimid period city and was located within the walls constructed during the Islamic period. A new cathedral was erected on the site of the Great Mosque and the city walls were strengthened. The Islamic residential quarter near the inner harbour went out of use and the area was used as a cemetery and later as a quarry for stone used in the repair of the town wall.

Conclusion

There was clearly a considerable reduction in the size of the city from the Byzantine to the Crusader period (cf **Figs. 50 and 51**). The date of this transformation is not known though it appears to have been early in the Islamic period (perhaps during the tenth century when the circuit of the walls was reduced by the Fatimids). The precise reasons for this contraction are not known. One suggestion is that the city suffered considerably from the Islamic conquest and shrank to its medieval size soon afterwards (see for example Schick 1995, 278). Another

[11] It had previously been assumed that the theatre was converted into a fortress during Byzantine rule based on Italian excavations in the 1960s.

suggestion is that the city suffered as a result of the earthquake (or tidal wave) that reduced Baysan/ Scythoplis in 749 AD. However it seems more likely that its decline is due to the construction of Ramla as a new capital in the early eighth century which diminished the importance of Caesarea (cf Wheatley 2001, 124). A related factor is that Caesarea's position on the coast left it exposed to Byzantine attacks as in 972 (see above) and that it was therefore not considered a safe place particularly when the citadel was no longer in use.

Jaffa

History

Jaffa is located on a *kurkar* ridge on the coast between Arsuf and Ashdod. As the best natural anchorage south of Acre the site has a continuous history of occupation from the Bronze age. During the Byzantine period the city was the seat of a bishop and was enclosed by walls (*GPR* 70-1; *TIR* 152-3). In the eighth century the biographer of Anglo-Saxon pilgrim Willibald noted that the city had a church dedicated to St.Peter (Wilkinson 1977, 132). In 630 Jaffa had a Monothelite bishop who was opposed by the bishop of Tantura/Dor (Gil 1992, 663 ; Schick 1995, 359-6). In 636 the city was captured by the Muslim Arabs though we have little information about the importance of the town at this time (Baladhuri ed. de Goeje, 138 : Gil 1992, 55). During the Umayyad period Jaffa was one of a number of coastal towns which was fortified and garrisoned in preparation for Byzantine counter offensives (Baladhuri ed. de Goeje, 117; Elad 1997/8 156-3; Gil 1992, 117) The foundation of Ramla as regional capital in the early eighth century probably increased the significance of Jaffa. This relationship between the two sites continued throughout the Islamic period.

In the latter part of the eighth century the Abbasid governor of Egypt, Ibn Tulun, eastablished a fortress at Jaffa on the ruins of the ancient city (Ibn Khaldun ed. al-Hurini 652 ; Gil 1992,459 n.74). In general, however, Jaffa does not appear to have been particularly important during this period, thus Gil (1992, 331) notes that it is mentioned in the Geniza documents much less frequently than either Ascalon or Tyre. At the end of the tenth century Muqaddasi describes it as follows; 'Jaffa is a small town on the sea. It is a storehouse (*khizana*) of Palestine and the port of Ramla. Over it is a mighty fortress, with iron clad gates, the sea gate being wholly of iron. The mosque overlooks the coast of the sea and the harbour is good' (ed. de Goeje also Le Strange 1890, 550-1).

In June 1099 AD the city was captured by the Crusaders who re-established it as a major port with a citadel and lower walled town (for a summary of the history of the Crusader period see Pringle 1993, I 264-6). The castle was built on the remains of the ancient city and contained the residence of the Patriarch of Jerusalem as well as that of the count of Jaffa. The lower town had two gateways, one facing south towards Ascalon and the other facing Jerusalem and Ramla to the east. The city remained under Crusader control until 1268 (with the exception of two periods between 1187 and 1191 and between 1196 and 1204) when it was captured by the Mamluk Sultan Baybars who personally took part in the destruction of the city and its defences defences (Ibn al-Furat ed. Lyons & Lyons, II, 108 and notes on 221). The significance of the capture of Jaffa was vividly recalled in an inscription (now lost) in the White Mosque of Ramla (*RCEA* , XII, No. 4588 and Max Van Berchem 1977) and in the removal of timber and marble for use in Baybars new mosque in Cairo (Bloom 1989, 193).

During the fourteenth century there is some evidence of a recovery in the fortunes of the town which was brought to an abrupt end by when the city was razed and the harbour filled in to prevent its capture and re-used by Christian powers. For the remainder of the Mamluk period and the early Ottoman period the site remained unimportant as a settlement thus in 1596 it had a population of approximately 75 (i.e. 15 families) (Hütteroth and Abdulfattah 1977, 151). However it was still important as a port for Christian pilgrims travelling to Jerusalem[12].

Archaeology

Because Jaffa developed as one of the major urban centres of Palestine in the latter Ottoman period much of the earlier city is today covered with buildings (**Plates 20-21**). Although there has been some rescue archaeology carried out within the 'Old City' of Jaffa the results in general are inconclusive. However a few general observations may be made. Firstly the topography of the town appears to have remained more or less the same with an elevated ridge overlooking the harbour with a lower area on the east and south sides. Muqaddasi's description of the fort above the town implies that the fort was located on this raised area which was later used by the Crusaders for their citadel. The only archaeological evidence for these defences is a section of wall uncovered in 1978 which was built of stones bonded with re-used antique columns (Pringle 1993, 266). More recently evidence of a town wall was recovered in excavations though the exact date of the wall (i.e early Islamic or Crusader) is not clear (Peilstockeer and Priel 2000).

Other evidence (published) for the early Islamic period is so far confined to pottery with no identifiable structures. There is some evidence for the Mamluk period in the form of some re-used architectural pieces in the *sabil* of the Great Mosque (Kanaan 2001, 203 n.7).

Conclusion

Unfortunately the archaeological evidence is too patchy to provide any evidence for the town's layout or size.

[12] Although Christian pilgrims used the port there is also evidence that it was used by merchants (see for example Heyd 1960 128-138 esp.Nos. 80 and 82).

Table 24. Jaffa Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population		A (7ha.)	A (7ha.)		
Fortifications	H	A?	A?		
Religious buildings		H (mosque)			
Secular public buildings					
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

Majdal

History

Majdal is located to the north east of the ancient city of Ascalon and is now one of the outer suburbs of the modern city of Ashqelon (Palestine Grid 1108 1196). It is possible that Majdal may be identified with the settlement of Migdal-yene mentioned in the campaign of the Pharaoh Amen-hotep II in the fifteenth century BC (Aharoni 1979, 166-8). In Roman times there was a settlement at the site known as Peleia (Palaia) (*TIR*, 200; *GRP* 86). In general, however, the site appears to have been of little importance until the medieval period. After the destruction of Ascalon by the Mamluk Sultan Baybars, Majdal became the regional centre. Unfortunately there are no direct references to the place from the Mamluk period. However in the 1596 *daftar* Majdal is referred to as a village in the nahiya of Gaza with a population of 559 *khana* (households), equivalent to a population of approximately 2790 people (Hütteroth and Abdulfattah, 1976, 144). As pointed out by Cohen and Lewis (1978, 19) this is twice the population of Ramla in the same period. The taxable produce of the settlement included occasional revenues, 'goats and bees' and a market toll (Hütteroth and Abdulfattah, 1976, 144). Later in the eighteenth century Majdal, together with Ramla and Gaza was recognized as a regional centre with a *mukhtar*.

Archaeology

There is no evidence that Majdal was of much importance before the medieval period. Excavations in 1991 near the centre of the town revealed a few Byzantine remains which the excavator described as follows 'This meagre living level probably represents a campsite of the Byzantine period' (Tahal 1995). Another excavation in the north of the town revealed a Roman family tomb which had fallen into disuse by the Byzantine period (Kogan-Zehavi 1996).

Mamluk occupation at Majdal is indicated by the mosque (Jami' al-Kabir) located in the centre of the town (**Plates 22-25**). This is a large building comprising a minaret, a prayer hall with arched portico and a courtyard lined with arcades supported on re-used antique columns. An inscription above the entrance to the mosque recalls the construction of the building by the Amir Sayf al-Din Salar in 1300 AD (Meinicke 1992, II, 91). It is not clear how much of the mosque is of this date though the prayer hall, portico and minaret are certainly of Mamluk construction (the arcades around the portico were re-built during the late Ottoman period).

The other building of interest within the town is the Jami' al-Saghir located approximately 500 metres to the south west of the main mosque. This is an 'L' shaped building comprising a vaulted arcade and an elongated chamber roofed by two cross vaults. A stone embedded into the wall bears an inscription stating that it is part of the Wali of Tamimi Idari and lists the property belonging to the *waqf*. The inscription is dated 958 H (1551-2 AD) (PAM File 135).

Unfortunately much of the town has been destroyed since 1948 and, without excavation, it will be difficult to trace the origins of the settlement. The only other clue to the origins of the settlement is a map made in the early C20[th] (**Fig. 48**).

Conclusion

Although it is not clear whether Majdal attained urban status in the Mamluk period the size of the mosque indicates something more than a village. By the sixteenth century the village had clearly attained urban status in terms of population, having a market and two mosques.

Minat al-Qal'a

History

This site is located on the coast between Jaffa and Ascalon (Palestine Grid 132 114).

Little is known of the history of the site. In Byzantine times the settlement was known as Azotus Paralious and was shown on the sixth century Madaba map (*TIR*, 72). In the tenth century al-Muqaddisi (ed Miquel 209-10)

Table 25. Majdal Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population				A (50 ha.)	A (50 ha.)
Fortifications					
Religious buildings				A (mosques)	A (mosques)
Secular public buildings					
Commercial buildings					H (market)
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

mentions the port of Isdud as one of the coastal forts from which prisoners are ransomed. In the twelfth century the site was occupied by Nicolas de Beroard who was a knight of the Lord of Ramla (RRH, no.472). There is no mention of the site under the Ayyubids or Mamluks and one may assume that it was destroyed along with the other coastal towns[13].

Archaeology

The remains of the town cover an area 1 km long by 500 km wide stretching along the coast marked by Byzantine and medieval pottery **(Fig.49)** (PAM R.W.Hamilton 5-8/3/37; Kaplan 1969, Fig.2). The centre of the site is represented by the fortress of Minat al-Qal'a a large rectangular building with solid round buttress **(Plate 26)**. Recent excavations have proved that the fort was probably constructed by the Umayyads although it was later remodelled by the Fatimids and the Crusaders (Nachlieli et al 2000: Pipano 1988, 165; Kloner and Berman 1970, 26; Conder & Kitchener 1882 Vol II, 426-7). In addition to the castle there are two other standing remains at the site each of which comprise a number of structures including a domed room **(Plate 27)** (PAM report by R.W.Hamilton 5-8/3/37; cf Dow 1996, 48, Plate 29). Unfortunately the remainder of the area of the town has not been subjected to systematic archaeological investigation though a recent rescue excavation approximately two kilometres east of Minat al-Qal'a has revealed a series of structures dated to the ninth and tenth centuries ('Asa 'el 1992). According to the excavator one of these structures may have been ' a watchtower which formed part of a defensive system [of the town] in the early Islamic period' ('Asa 'el 1992, 40)

Conclusion

It appears that this was the main settlement at Isdud/Ashdod between the Byzantine and Crusader periods (i.e. during the early Islamic period) and as such should be considered as a town.

[13] The survival of Gaza may be attributed to two factors, (i) its proximity to Egypt and the Via Maris and (ii) the fact that it is located three kilometres form the coast and is not actually a port city.

Minat Rubin

History

This site is located on the coast between Ashdod and Jaffa near the mouth of the Nahr Rubin (Palestine Grid 121 147). The harbour city of Jamnia (Yibna) is an ancient site mentioned both by Pliny and Ptolemy (*GRP*, 67-8). We have very little historical information about the site but it can be assumed that it was captured by the Muslims in 634 AD (i.e the same times as the main town). In the latter part of the tenth century Muqaddisi describes Mahuz Yubna as one of a series of fortified posts along the coast (ed de Goeje, 177). The site appears to have been abandoned by the eleventh century.

Archaeology

Unfortunately much of the town site is unavailable for archaeological work because it is occupied by a nuclear reactor complex built in 1960 (Vilnay 1979, 254). Before the construction of the reactor the site contained the remains of a port town contained with a semi-circular wall. Recent excavations near the city have revealed a series of cisterns and an irrigation system as well as tombs (Vitto 1983). Occupation of the site has been dated from the fifth to the end of the sixth century (Dauphin 1998, 835, No. 364) The only medieval remains are the nearby tomb of Nabi Rubin built in 1436 (Petersen 1996, 103-8).

Conclusion

The site evidently needs further archaeological investigation particularly focussing on when the site was abandoned and its relationship to Yibna.

Qaqun

History

This site is located on the eastern edge of the coastal plain approximately midway between Arsuf and Caesarea (Palestine Grid 1497 1962).Although there was probably a village on the site before the twelfth century the

Table 26. Minat al-Qal'a Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A (40 ha.)	A (40 ha.)			
Fortifications		A	A		
Religious buildings		A (mosque in fortress)			
Secular public buildings		A (bathouses)			
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

Table 27. Minat Rubin Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size	H	H			
Fortifications	A	H			
Religious buildings					
Secular public buildings					
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

establishment of a castle by the Crusaders sometime before 1123 and possibly as early as 1101 gave it added strategic significance. The settlement had a mixed Frankish and Syrian (Christian and Muslim) population. The existence of a burgess court suggests that the settlement had an urban status even though it appears to have been principally agricultural and military in character (for Crusader history of site see Pringle 1986, 58-71).

In 1265 Qaqun fell to Sultan Baybars who rebuilt the castle and reconstructed the church as a mosque (Ibn al-Furat ed. Lyons & Lyons (2), 101; al-Maqrizi trans Quatremere (I,2),40). Following the destruction of Caesarea and Arsuf Qaqun now became the principal Mamluk centre for the central coastal plain (i.e from the Nahr al-Auja to the Nahr al-Zerka). In 1271 the Crusaders attempted to recapture the castle but were defeated after the Mamluks sent a relief force under amir Jamal al-Din Aqush al-Shamsi (Ibn al-Furat ed. Lyons & Lyons (2), 155; al-Maqrizi trans Quatremere (I,2), 101). The settlement later became a stop on the Cairo-Damascus post road and also served as a station for transporting snow from Lebanon to Cairo (Hartmann 1910, 962). The importance of the settlement as a stopping place was re-enforced by the construction of a large caravanserai by 'Alam al-Din Sanjar al-Jawli in the early fourteenth century (Mayer 1933, 118). Qalqashandi (ed Ali, IV, 100) described Qaqun as a pleasant town with a fortress, a mosque, a bath and a well.

It appears that Qaqun was no longer a military post under the Ottomans though the settlement was officially the centre of a *nahiya* in the *sanjaq* of Nablus (Bakhit 1982, 209). However the population was small, thus the 1596 *daftar* records a population of only 23 households (approximately 115 people) (Hütteroth and Abdulfattah 1977,138).

Archaeology

In 1983 the site was surveyed by the British School of Archaeology and recovered a continuous sequence of pottery from the late Byzantine to modern periods (Pringle 1986, 58-71). Unfortunately the pre-1948 village which stood on the site has been destroyed and the site has been planted with trees hampering any future archaeological investigation (Khalidi 1992, 559-60). The principal surviving monument is the Crusader keep and an enclosure wall which Pringle dates to the nineteenth century. The village mosque which stood until 1948 had a large dome which may have been of medieval construction (Husseini cited in Pringle 1986, 70). A number of medieval Arabic inscriptions were found at Qaqun before 1948 which indicate that it was a site of some significance (Richards 1986, 78-80).

Conclusion

Although the site appears to have been a town in the Crusader period there are few urban characteristics with the exception of the burgess' court and a viscount. There

Table 28. Qaqun Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population					
Fortifications			A		
Religious buildings				A (mosque)	
Secular public buildings					
Commercial buildings				A (khan)	
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

Table 29. Yubna/ Yibna Summary

	Byzantine	Early Islamic	Crusader	Ayyubid/ Mamluk	Early Ottoman
Size/ population	A ('large')			H (small town)	H (pop.774)
Fortifications			A (castle)		
Religious buildings	H (church)		A (church)	A (mosque and shrine)	
Secular public buildings				A (bridge)	
Commercial buildings					
Industrial activity					

A= Archaeological Evidence, H= Historical Evidence

is more evidence that Qaqun was a town in the Mamluk period on the evidence of Qalqashandi (ed Ali, IV, 100) and other Mamluk period references. It is clear that the significance of the site had been reduced by the early Ottoman period when the woods of Qaqun had become a place where travellers were likely to be attacked (Heyd 1960,96). Unfortunately there is little archaeological evidence for Qaqun's urban status in the Mamluk period.

Yubna/ Yibna /Ibelin

History

Yibna is located on the coastal plain approximately five kilometres from the Mediterranean, midway between Jaffa and Ashdod (Palestine Grid 126 141). A modern Israeli settlement occupies the north of the ancient and medieval site.

In Roman times the town was known as Iamnia and from the fourth century it functioned as an Episcopal see (*TIR* 149-50; *GPR* 67)[14]. According to Ya'qubi the town of Yibna was captured by Usama ibn Zayd in 632 AD on the orders of the prophet. However Gil believes that this is a mistaken identification and that a more likely date for the conquest of the town is 634 AD (1992, 41and 55). In the Umayyad period Yibna was clearly important as one of the few towns that minted its own coins. Ya'qubi (ed de Goeje) writing in the mid-ninth noted that in his time the town had a Samritan population. In the tenth century Muqaddasi described Yavne as a town with a pretty mosque and a producer of 'Damascus' figs (ed de Goeje, 176). The strategic position of the town meant that it was the location of at least four battles between the Crusaders and the Muslims. By 1123 the town was largely deserted and, according to Fulcher of Chartres, it had been reduced to the size of a small village. In 1141 the Crusaders established a castle and a church on the site which became the centre of a new Crusader town (Pringle 1997, 109, No. 235; Pringle 1993-, II, 378-84). In the thirteenth century Yaqut described Yibna as a small town (*bulayda*) (ed. Wustenfeld, IV, 1007). According to the 1596 *daftar* Yibna is a village with a population of 129 households (i.e. approximately 774) (Hütteroth and Abdulfattah 1977, 143).

Archaeology

The pre-1948 village of Yabneh was located on a large tell with a circumference of 1.2 kilometres. Despite the evident importance of this site excavations have been very limited. A recent rescue excavation at the edge of the tell indicated that this was a large settlement in Byzantine times and that below this there were three metres of occupation (Levy 1991). Further evidence of the Byzantine and perhaps early Islamic period includes a mosaic pavement and some tombs (Dauphin 1998, 842).

[14] Iamnia appears on the Madaba map as an unfortified settlement with a church (Donner 1992, 69).

Medieval occupation is marked by the church/mosque on the summit of the tell, some stone walls presumed to be part of the Crusader castle, the Tomb of Abu Hurayra and a bridge.

The church/ mosque has been discussed by a number of authors most notably Clermont Ganneau (II, 168) who noted that the mosque, then in use, was a converted Crusader church. The church has been discussed by a number of authors most recently Pringle (1993-, II, 378-84) and the mosque has been described by L.A. Mayer (Mayer and Pinkerfeld 1950, 20-24). The minaret of the mosque included an inscription stating that it was built by the amir Bashtaq in the year 738 AH (1335 AD). Although the location of the early Islamic mosque is not known it seems likely that it may have occupied the site upon which the Crusader church was later built. Unfortunately little survives of the Crusader castle though William of Tyre observed that it was built of stones robbed from the deserted Islamic period town.

The tomb of Abu Hurayra, located to the south west of the tell, is a large well built monument comprising a domed tomb chamber and a portico of six domes (Plate 33). The building is dated by two inscriptions one above the entrance to the [illegible] attributing the construction to Sula[illegible] in 1293 and another (now vanished) [illegible] the construction to the Mamluk Sultan Baybars in 1274 (Mayer and Pinkerfeld 1950, 20-24).

The fourth monument which has survived is a bridge crossing the Nahr Rubin which was probably one of a number of bridges built by Baybars (although there is no inscription confirming this).

Conclusion

Although the historical information gives us some indication that Yibna was an important town in the early Islamic period there is no archaeological evidence for this. The archaeological evidence for the Crusader and Mamluk period is limited to the standing monuments. It would be very useful to have an excavation of this site both to confirm the importance of the site in early Islamic times and to compare the Crusader new town with the earlier and later Muslim towns. One further problem should be mentioned at this point is that the early Islamic town may have been located at the port as appears to have been the case with Isdud (see above Minat Rubin).

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11. RAMLA

History

Ramla is located on the southern coastal plain approximately twenty kilometres south east of Jaffa. Unlike most of the other towns in Palestine Ramla was founded by the Muslim Arabs and presents one of the few examples of Islamic urban planning on the west side of the Syrian desert.

Although the foundation of the town by the Muslims is generally accepted by most historians it has occasionally been questioned most notably by Isa Shalom (1973) who argued that there are references to Ramla in pre-Islamic Jewish sources. It is also argued by Shalom and a few others that references to Ramla in Arabic sources pre-dating the eighth century prove that there must have been a settlement of this name before that time. However, on examination, both of Shalom's main arguments can be set aside. The references to Ramla in sources referring to the time before the eighth century are themselves of a later date and use the term Ramla anachronistically. The supposed references to Ramla in pre-Islamic Jewish literature depends on a rather unlikely interpretation of *t'luliah* as sand rather than the more usual meaning of land.

The earliest account of the foundation of the city is given by al-Baladhuri (255 AH / 869 AD):

'The caliph al-Walid made his brother Sulayman Governor of the Province of Filastine, who took up his residence at Lydda. Sulayman subsequently founded the town of al-Ramlah, and made it his capital. The first building raised here was his palace and the house called Dar al-Sabbaghin (the House of Dyers)... Then Sulayman planned the mosque, and began to build it, but he succeeded to the caliphate before it was completed.' (Baladhuri trans LeStrange 1890, 301)

The exact date of the foundation of the city is not stated though it must have been before 24th February 715 AD when the caliph al Walid died and was succeeded by his brother Sulayman. The new city rapidly developed as a regional capital as testified by the fact that coins were minted here as early as 720 AD. The nearby town of Lydda/Lod which had functioned as an economic capital under the Byzantines suffered as a consequence of Ramla's creation a fact which is explicitly stated in the sources, thus al-Ya'qubi (ed. Houtsma 1883, 351) states that the houses of Lydda were dismantled to provide building material for Ramla.

By the tenth century the city was clearly very prosperous as indicated by al-Muqaddisi who described it as follows;

Ramla is the capital of Palestine. It is a fine city, and well built; its water good and plentiful; its fruits abundant. It combines manifold advantages, situated as it is in the midst of beautiful villages and lordly towns... It possesses magnificent inns and pleasant baths, dainty food and various condiments, spacious houses, fine mosques and broad roads... The city occupies the area of a square mile; its houses are built of finely quarried stones. The best known among its gates are the Gate of the Soldier's well (Darb Bir al 'Askar), the Gate of the 'Annabah Mosque, the Gate of Jerusalem, the Gate of Bila'ah, the Lydda gate (Darb Ludd) the Jaffa Gate (Darb Yafa), the Egypt Gate (Darb Misr), and the Dajun Gate (Muqaddisi trans Le Strange 1886, 32-3).

The economic prosperity of the city is confirmed in many other sources most notably the documents of the Cairo Genizah which indicate that Ramla was the centre of the import-export trade in relation to Egypt (cf Gil 1992, 371).

In the eleventh century the prosperity of the new city, and the rest of Palestine, was shaken by a number of man made and natural disasters. The principal natural disaster was the earthquake of 3rd December 1033 for which Ramla seemed to be the epicentre. The earthquake destroyed two thirds of the city and the homeless were housed in tents outside the city provided by the governor of Ramla (Gil 1992, 595). Less than forty years later the city was struck by two further earthquakes in 1068 and 1070 (Amiran 1950, 51, 227). Warfare between the Fatimids and various enemies including the Qaramartis, the Turcomans and the beduin Arabs was equally devastating at this time and the city wall in Ramla had only just been rebuilt when the earthquake of 1033 struck (Gil 1992, 594). There is however some evidence that the city had recovered by the middle of the century thus the Persian traveller Nasir i-Khusrau described Ramla as ' a great city, with strong walls built of stone, mortared, of great height and thickness, with iron gates opening therein... In the city...there is marble in plenty, and most of the buildings and private houses are of this material' (Trans Le Strange 1888).

In 1099 Ramla was taken by the Crusaders who found the city deserted with its gates open presumably out of fear of the new invaders. For the next two and a half centuries the city was under the control of the Franks who built a large church and a castle with a moat (William of Tyre trans. Babcock and Krey, I, 438-9). In 1191 the town was briefly recaptured by Saladin who destroyed the castle before it was handed over to joint Muslim Christian control by the Treaty of Jaffa in 1192 (Baha' al-Din trans. *PPTS* 300-2 and 380-7). During the early thirteenth century the town appears to have been in a state of ruin passing in and out of the control of the Crusaders or the Muslims (see for example Joinville trans Shaw 1963, 300-1). After the capture of Jerusalem from the Crusaders in 1244 Ramla seems to have been left largely

unoccupied though nominally under Crusader control. In 1266 formal Muslim authority was restored when Baybars arrived in the city to take control.

Under the Mamluks there appears to have been some attempt at restoring the city to its former glory. To this end Baybars restored the White Mosque and in the following centuries a number of important buildings were constructed. The investment appears to have some impact thus in the early fourteenth century Abu al-Fida (ed. Renaud & de Slane 226-7) describes it as the most populous city of Palestine (Lutfi 1985, 219). Cotton was one of the main products of the city during this period although agriculture and trade were also important (Newett 1907, 239). Economically the city appears to have been important enough for the Venetians to establish a colony there (Ashtor 1983, 254). Nevertheless by the end of the fifteenth century Ramla had still not fully recovered its former glory as indicated by Mujir al-Din's description;-

Of the town there remains not even a third, nor even a quarter. Some new mosques and new minarets have been constructed there since the time of 'Abd al-Malik al-Nasir Muhammad Qalawun and after. The buildings that exist at present in the town are for the most part destroyed or in ruin. The community mosque is at present surrounded by cemeteries ... Of former constructions around the mosque there only remains a quarter adjoining it in the north side which is reduced to the state of a village. The city has thus become separated from the mosque (Mujir al-Din , II 417-8).

The administrative status of Ramla during the Mamluk period fluctuated. In the early 1400's the Governor of Jerusalem and Ramla was a joint post appointed by the governor of Damascus. Sometime between 1468 and 1496 Ramla was transferred from the authority of the Governor of Damascus to the governor of Gaza. In 1494 the control of Ramla was returned to the governor of Jerusalem. The following year in 1495 Jerusalem, Ramla, Gaza and Hebron were all placed under the control of a single governor. During most of this period the official representative of the Mamluk authority in the city appears to have been the *kashif* or tax collector (see also Burgoyne and Abu al-Hajj 1979, 135-6).

The city suffered as a result of the Ottoman conquest when the citizens were punished for their disobedience to the new rulers (Singer 1990, 57). Descriptions of the town in the latter part of the sixteenth century indicate that the town was in a greatly reduced condition thus Dr.Rauwolf who visited in 1575 described Ramla as '... pretty large, but very open like unto a village, very pitifully built (cited in Ray 1963, I, 270). This picture of decline is echoed in the Ottoman official documents which place Ramla as capital of a *nahiya* in the *liwa* of Gaza, in other words Ramla was now a sub-district of Gaza. The tax registers give a similar story of a town in lessening importance, thus in AD 1525/6 there was a population of approximately 2040 (336 households) rising to 3749 (610 households) in AD 1548/9 and declining to 1698 in AD 1596/7 (Cohen and Lewis 1978, 135-144).

Archaeology (Appendix 1, Table 4)

Monuments

At present the city is divided into two parts, the 'Old City' which contains a number of Mamluk and Ottoman buildings and the new city (established since 1948). The two best known monuments are both in the new city, these are the White Mosque (Jami' al-Abiyad) and the Bir al-'Anaziyya. The White Mosque is generally identified as the mosque founded by Sulayman in the early eighth century though most of the present structure is of medieval date. Approximately 500 metres north of the White Mosque is the al-'Anaziyya cistern which is the only extant structure in Ramla which is can be dated to the early Islamic period. The monuments of the old city are less well known and include several important medieval and Ottoman structures. Medieval buildings include the great Mosque (originally built as a church by the Crusaders in the twelfth century), the sixteenth century mosque of Abu al'Awn and a large khan on the edge of the town. In addition there are several shaykhs tombs of Mamluk origin (Petersen 1995). Buildings which are known to have existed but of which no remains have been identified include a hospital founded by Fakhr al-Din (d.1332) and a *madrassa, zawiyya* or *khanqah* known as the Khassikiyya which flourished in the late fourteenth and early fifteenth centuries (Burgoyne 1983, 61 Khassikiyya & 259 hospital).

Excavations

Archaeological excavations have taken place in the city since the Mandate Period although few have been published in any detail. The first Israeli excavations were carried out by J. Kaplan in 1949 and were published in 1959 along with some additional soundings carried out in 1956 (see Kaplan 1959).

The next major excavations were carried out by M.Rosen Ayalon and A. Eitan (1966; 1969) in an area to the north west of the White Mosque[1]. The number of excavations has increased significantly during the past ten years when the new city was expanded to house new immigrants from the former Soviet Union. Many of these are summarised in a booklet recently produced by the CBRL and Israel Antiquities Authority (Vitto and Gibson 1999). In addition to the excavations a geophysical and topographic survey have been carried out (Petersen 2000 and 2001).

[1] Note; in the published reports the location of the site is consistently given as south west of the city (eg Rosen-Ayalon and Eitan 1966 and 1969) though a map attatched to a later publication (Rosen-Ayalon 1976) shows the area of Giorah to the north west of the White Mosque. In this discussion I have taken the map as more reliable indicator of location than the written description.

In view of the large number of excavations that have taken place the results will be discussed under a number of headings.

White Mosque (Jami' al-Abiyad) (Fig. 62 and Plates 35-38)

This is clearly the most significant monument in the city and consequently it has received considerable attention from archaeologists. The standing remains comprise three major components, the minaret, the cisterns and the prayer hall set within a large nearly square enclosure. Although the majority of the standing remains belong to the medieval period it has generally been assumed that the building occupies the site and retains much of the shape of the eighth century mosque described by al-Baladhuri and later by al-Muqaddisi and Nasir i-Khusraw. In the nineteenth century the building attracted the attention of a number of archaeologists including the Survey of Western Palestine (Conder and Kitchener 1882,271) though it was not until the 1950's that the first excavations were carried out under the direction of Kaplan (1959). Between 1979 and 1980 further work was carried out by Ben Dov immediately outside the north wall of the White Mosque (Ben Dov 1984). More recently (1998) an architectural survey of the sanctuary of the mosque was carried out by Michael Burgoyne as part of a CBRL project on Ramla[1].

Kaplan's excavations were aimed at uncovering the foundations of the White Mosque and were not concerned with establishing a stratigraphic sequence. Three main phases were identified on the basis of a number of soundings and comparison of the mortars used. The first phase was dated to the Umayyad period, the second phase was ascribed to the Ayyubid period (Salah al-Din) and the third phase was assigned to the Mamluk period. According to the report finds from the excavations were from mixed layers with a predominance of Crusader and Mamluk sherds.

Ben Dov who excavated the area immediately outside the north wall of the White Mosque (Ben Dov 1984) identified five structural phases 1) an Umayyad wall 2) an Abbasid-Fatimid vaulted arcade 3) the minaret, 4) a Mamluk wall (post 1318) 5) a series of vaulted cells built up against the wall dated by pottery to the 14^{th}-16^{th} centuries.

Examination of the plans and sections published by Ben-Dov shows a discrepancy between his results and those of Jacob Kaplan produced more than twenty years earlier. According to Kaplan the north wall of the enclosure should be dated to the Umayyad period whereas Ben-Dov appears to date the same wall to the Mamluk period (i.e. it post dates the minaret). The problem can be partially explained by noting that the wall abutting the minaret in Ben-Dov's section has a horizontal break, the upper part post-dating the minaret and the lower part belonging to an earlier phase dated to the Abbasid-Fatimid period. If we accept Ben-Dov's conclusions it would appear that the foundations which Kaplan dates to the Umayyad period should be dated to the Abbasid-Fatimid period. The presence of an earlier wall indicates that the alignment of the north wall may have been different in the original , Umayyad period mosque. It is interesting that this earlier wall alignment is parallel to that of the central and western parts of the *qibla* (south) wall (i.e. not the east end of the south wall and the east wall) and the square structure in the middle (see below). Unfortunately there is no published discussion or illustration of the pottery so that it is difficult to verify Ben-Dov's dating.

Michael Burgoyne's 1998 survey of the mosque (upublished) provides further confirmation that Kaplan's interpretation of the phasing of the building is not correct. Burgoyne's most important finding is that the central part of the prayer hall is different from and probably earlier than the east and west sides (this is based on an examination of the hood mouldings which run across the front of the qibla arcade). The remains of *muqarnas* squinches on the bay immediately in front of the mihrab (visible on unpublished Creswell photographs) indicates that this area was once covered by a dome which was added to a pre-existing set of cross vaults. The dome can, with some certainty, be identified with that built by Baybars' in AD 1266 as part of his reconstruction of the mosque commemorated in an inscription (now lost) (Conder and Kitchener 1883,II, 272 ; Van Berchem 1978, 405-9)[2]. Therefore the vaults on which the dome rest should be dated to a period before 1266. The most probable explanation is that these arcades were built during the Ayyubid period , probably in 586 AH (i.e. AD1190/1) according to an inscription built into the *maqam* of Nabi Slaih in the north-west corner of the mosque[3].

Square Structure

The only other part of the mosque on the same alignment as the central part of the *qibla* wall is a square structure (now almost completely destroyed) which stood midway between the minaret and the prayer hall[4]. This structure was excavated by Kaplan who described it as follows;

'in the centre of the courtyard were uncovered the foundations of a massive structure measuring 8m. x 8m. with foundations 1.7m wide going down to 1,2m below ground-level. Around the structure is a low wall supporting and retaining the earth thus forming a part of

[2] See also Pringle (1993-Churches II, 187) which should now be revised.

[3] It should be noted that Mujir al-Din also stated that Baybars built the dome which is above the *mihrab* and the door which faces it (trans Sauvaire 207).

[4] Mayer who published this inscription (Mayer 1959) thought that it could not refer to the White Mosque because of the lowly status of the lowly status of Iyas the person responsible for commissioning the work and because of the clumsy style of the script. However the inscription does clearly refer to a Friday Mosque, it is located within the precincts of the White Mosque and it does coincide with the period when Saladin briefly had control of the town before handing it over to joint control in 1291.

the platform around it. The purpose of this structure is not clear'

The position of this building in the centre of the mosque courtyard and its strong construction suggest that it may have been the *bayt al-mal* or place where the community stored its money. Support for this hypothesis is provided by the fact that we know that Sulayman also built the *bayt al-mal* for the Mosque of 'Amr in Fustat in 99AH (717-18) (Creswell 1989, 126).

Cisterns

The other notable features of the courtyard are the three underground cisterns. Two of these were cleared during the British Mandate and the third was discovered during Kaplan's excavations. Although an inscription in the north-west cistern is dated to 1408 this clearly refers to repairs or re-plastering and does not appear to be a construction date (Mayer 1959, 117,B). Kaplan does not venture an opinion on their date of construction though he does point out their similarity to the al-'Anaziyya cisterns (Kaplan 1959, 110 n.6; see also Rosen-Ayalon 1996, 262). The alignment of the cisterns follows that of the east end of the qibla wall, and the east and north walls (i.e. neither the west wall nor the west end of the *qibla* wall) and is therefore likely to date from a similar period (i.e Abbasid /Fatimid or later).

Minaret

The square minaret in the centre of the north wall of the courtyard is dated to 1318 by an inscription above the entrance (Max Van Berchem 1978, 409, N.2 , Conder and Kitchener, II, 272; Mayer 1954, 127, T.14 ; Mujir al-Din trans Sauvaire, 206). Kaplan excavated soundings at the north-east and south-east corners in order to establish whether the Mamluk structure replaced an earlier minaret. Kaplan's excavations revealed that the fourteenth century minaret stood on the destroyed remains of the north wall. This result was confirmed by Ben-Dov's excavations in the 1980's.

Summary

It is clear from the above that the structural history of the mosque is in need of further investigation before any definitive conclusions can be drawn. In the meantime a few observations are possible which are summarised below and in **Figure 62**;

1) It seems likely that the original Umayyad orientation of the mosque is represented by the central and western section of the *qibla* wall, the earliest wall to the north of the minaret, and the square structure in the centre of the courtyard/
2) In a later phase dated by Ben-Dov to the Abbasid / Fatimid period the orientation was revised (for another example of changing the orientation of a mosque see Creswell's discussion of Wasit). Other features belonging to this phase include the cisterns and a range of shop units outside the north wall of the mosque.
3) A third phase is represented by the back wall of the central bay and the mihrab which clearly pre-date the construction of the dome above in 1266. Both the wall and the mihrab have a medieval appearance and are probably part of the reconstruction of the mosque following the earthquakes of the eleventh century. According to Mujir al-Din the mosque was repaired by Salah al-Din in 1190. It is likely that Mujir al-Din based this statement on an Ayyubid inscription which is now built into the north wall of the mosque near the tomb of Nabi Salih. Mayer who published the inscription thought that it was unlikely to refer to the White Mosque because of the poor quality of the epigraphy, the low status of the builder (Iyas) and the fact that it referred to a repair rather than a new construction. Instead Mayer suggested that the inscription came from another unknown building (1959, 116-7). However the physical evidence of the White Mosque indicates an Ayyubid phase for which the inscription may provide additional support. The fact that the inscription only refers to a repair or re-building is consistent with the remains and the low status of Iyas may simply reflect the fact that Ayyubid control of the city was only short-lived (one year at this time).
4) This phase is represented by the dome above the mihrab and the east and west wings of the *qibla* wall characterised by the buttresses with sloping cills. The date of this phase is given by the Baybars inscription of 1266.
5) This phase includes the minaret built in 1318 and probably includes the arcade on the east side of the courtyard which butts against the sanctuary façade clearly indicating it is of later date.
6) This phase includes the *maqam*/mausoleum excavated by Ben-Dov and a range of shop units built on the outside of the north wall of the courtyard.

Water Supply

There is considerable historical and archaeological evidence which relates to the water supply of Ramla. As a new town Ramla did not have an adequate natural water supply and according to the Islamic geographers water was brought in via a channel known as the *Barada* after the river which flows through Damascus. It is probable that this channel should be identified with the aqueduct known as Qanat Bint al-Kafir which until recently could be traced form its source near Gezer to the outskirts of Ramla.

A section of this channel has recently been investigated by the Israel Antiquities authority which revealed a channel wide made of fieldstones set in mortar (Zelinger 2000). Another section of the same channel was recently detected by magnetomerty confirming the route indicated on the Palestine Exploration Fund map. In addition to this main channel a further section of aqueduct was detected to the west of the city (Petersen 2001).

Baladhuri states that the water supply of the city was paid for by the caliphs under the Umayyads and early Abbasids until the reign of al-Mu'tasim who made the inhabitants of the city pay an annual charge for the service (Le Strange 1890, 304). An example of the caliphal patronage of the waters system is the al-'Anaziyya cisterns. After the White Mosque this is best known monument in Ramla is the al-'Anaziyya cisterns dated by inscription to 789 AD during the reign of the Abbasid caliph Harun al-Rashid (**Plate 41**). The cisterns comprise six vaulted bays supported by cruciform piers (**Plates 39** and **40**). Architecturally the cisterns are important as the earliest example of the consistent use of the pointed arch (Creswell 1989, 284-5).

In addition to the Bir al-'Anaziya a number of other cisterns are known. One of these, Birkat Bint al-Kafir (now built over), is located between the al-Anaziya cisterns and the White Mosque. The date of this cistern is not known though its name and location suggests that it formed part of the early Islamic system. To the east of the Old city there is another open cistern known as Birkat al-Jammus (cistern of the water Buffalo).

By the eleventh century the public water system appears to have been unable to supply the needs of the inhabitants, thus Nasir i Khusrau (trans Le Strange 1888, 148) relates that the citizens had their own private cisterns. Confirmation of the dilapidated condition of the town's cisterns can be found in Joinville's account of a skirmish near Ramla where a man and three horses fell into a cistern (Joinville trans Shaw, 301). A large number of domestic cisterns (over 20) have been excavated all of which are bottle shaped and lined with stone (see **Fig. 57** and **Table 33** Nos. 1,15,18, 20, 26, 27,28,31 and 37).

Industry

Pottery Production

The remains of at least four pottery workshops have been found (see **Fig. 58**). The most well publicised is that excavated by Miriam Rosen Ayalon and Abaraham Eitan in an area to the north west of the White Mosque[5]. An area of approximately 250 square metres was uncovered to a depth of two metres (Rosen Ayalon and Eitan 1966, 148). A large quantity of finds were recovered including pottery, glass, carved stone and metalwork. Part of the site appears to have been a potter's workshop with lamp moulds, wasters and a tray containing coloured glazes. Although four stratigraphic layers were observed the finds were not classified according to layer but presented as 'homogenous in all four strata' and dated to the eighth century (Rosen Ayalon and Eitan 1969, 4). A contemporary unpublished excavation by ... some ... distant... also yielded the same material' (Rosen Ayalon and Eitan, 1969, 4). Further excavations (also unpublished) 'near the centre of the old city' recovered simila material buried at considerable depth beneath thirteent to fourteenth century pottery. A comparison of the vessel illustrated with finds from other sites suggests that muc of the material belongs to the ninth and tenth centurie rather than the eighth century as Rosen Ayalon suggests.

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Baladhuri states that the water supply of the city was paid for by the caliphs under the Umayyads and early Abbasids until the reign of al-Mu'tasim who made the inhabitants of the city pay an annual charge for the service (Le Strange 1890, 304). An example of the caliphal patronage of the waters system is the al-'Anaziyya cisterns. After the White Mosque this is best known monument in Ramla is the al-'Anaziyya cisterns dated by inscription to 789 AD during the reign of the Abbasid caliph Harun al-Rashid (**Plate 41**). The cisterns comprise six vaulted bays supported by cruciform piers (**Plates 39** and **40**). Architecturally the cisterns are important as the earliest example of the consistent use of the pointed arch (Creswell 1989, 284-5).

In addition to the Bir al-'Anaziya a number of other cisterns are known. One of these, Birkat Bint al-Kafir (now built over), is located between the al-Anaziya cisterns and the White Mosque. The date of this cistern is not known though its name and location suggests that it formed part of the early Islamic system. To the east of the Old city there is another open cistern known as Birkat al-Jammus (cistern of the water Buffalo).

By the eleventh century the public water system appears to have been unable to supply the needs of the inhabitants, thus Nasir i Khusrau (trans Le Strange 1888, 148) relates that the citizens had their own private cisterns. Confirmation of the dilapidated condition of the town's cisterns can be found in Joinville's account of a skirmish near Ramla where a man and three horses fell into a cistern (Joinville trans Shaw, 301). A large number of domestic cisterns (over 20) have been excavated all of which are bottle shaped and lined with stone (see **Fig. 57** and **Table 33** Nos. 1,15,18, 20, 26, 27,28,31 and 37).

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There has been a considerable interest in the evidence for textile dyeing because the Dar al-Sabbaghin (House of Dyers) was one of the earliest buildings in the city. Evidence for textile dyeing was found in seven excavations (**Fig. 55**). In most cases the evidence was in the form of plaster lined vats with traces of red pigment. For example excavations outside the north wall of the White Mosque in the winter of 1991 uncovered an installation connected with the dying industry and dated to the eighth/ninth century (**Plates 42** and **43**) (Rosen-Ayalon 1996, 253-4; Porath and Ilani 1993 11* and 33). There is no evidence for dyeing installations from the medieval period (i.e. twelfth century onwards).

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to a khan in Ramla (Sharon 1968) and the goldsmith's hoard referred to above.

Two medieval khans are known, one (now destroyed) was located near to the centre of the medieval city immediately to the west of the Crusader church and the other (Khan al- Idham) is located to the south of the town and may even have been outside. There were also facilities for Europeans thus there was a Franciscan hospice located in the west of the town which housed Christian pilgrims and a Venetian merchants' colony though the location of this is not known.

Domestic Occupation

Generally domestic occupation is indicated by plaster floors, tabuns, cisterns, drains, refuse tips and cess pits. Very few walls relating to domestic buildings have survived so that complete house plans are rare. Some of the houses of the early Islamic period were evidently luxurious as can be inferred from the fact that some were decorated with mosaic floors. For example excavations in Tav-Kav Beth during 1973 uncovered a set of three mosaics which 'apparently…[belonged] to a rather well to do private dwelling' (Rosen-Ayalon 1976, 119). Two of the mosaics formed part of the same floor and were in the form of carpets containing animal and vegetal motifs set with geometric guilloches borders. The other mosaic, which was probably from the same house comprised a depiction of a mihrab containing a Quranic inscription (7/205). More recently a fourth mosaic has been excavated which contains a depiction of animals (**Plate 44**) (Glick and Gamil 2000).

The remains of a few Mamluk period were excavated by Torgë (1999) at the northern edge of the medieval city though few details are available.

Fortifications

Although the tenth century writer al-Muqaddasi mentions the fact that Ramla had at least eight gates he does not discuss the city walls. The first specific description of the fortifications is given by Nasir i-Khusraw who states that the city has '…strong walls built of stone, mortared, of great height and thickness, with iron gates opening therein' (*PPTS* trans. Le Strange, 21). When the Crusaders took control of the city less than fifty years later it was described as surrounded by a wall with towers, though it was also noted that it had neither outer defences nor a moat. The Crusaders accordingly fortified a part of the site with a moat and a stronghold (William of Tyre trans. Babcock and Krey I, 438-9). It may be presumed that the Crusader settlement comprised a castle or keep and a civilian settlement which included the Crusader church (later Jami' al-Kebir). However the defences appear to have been severely reduced by the end of the twelfth century and by 1252-3 appear to have been merely ruins (Joinville trans Shaw 300-1 which describes a Frenchman hiding in the walls of Ramla). In the fifteenth century town appears to have had some walls although they were not particularly strong (Casola 1494, 60).

The archaeological evidence for the fortifications is very restricted and the only excavation which claims to have uncovered part of the walls is a short note by Don Glick. As this is the only known archaeological description of the fortifications it is worth quoting the relevant parts of the report in full;

Two parallel, massive east-west walls (width 3m, height 4.5m) were exposed in the trench 21m apart. The walls were built of large fieldstones set into black cement and gravel…Part of an arched passage (width 2.5m) was exposed when the north wall was excavated; the east part of the arch can be seen in the east section of the channel. Glick 2000.

Two further trenches were opened to trace the course of the north wall. Both walls were dated to the 8th-9th centuries.

The only other possible evidence of fortification comes from an excavation by Avissar and Barbe on the eastern edge of the old city. The relevant part of the report states; These earlier [8th –9th century] remains were substantially cut in its central part by one deep trench with vertical sides. The fills in the trench contained numerous architectural debris: stones with adhering mortar and plaster, and paving slabs…the pottery from the fill suggests a date in the Crusader period (12th-13th centuries) (Avissar and Barbé 1999)

Unfortunately the precise location and the orientation of the cut were not given though its location on the eastern edge of the old city is consistent with what we known of Crusader occupation of the city.

One further observation on the fortifications during the Crusader period may be made based on the analysis of the contour plan produced between 1997 and 1999 (Petersen 2000). It is noticeable from the contour plan that the highest area of the current 'Old City' is located in the area now occupied by the Mamluk/Ottoman baths (Hammam al-Ridwan). The ground around this elevated area slopes down before levelling off to form a flat area to the south, east and north which may be the remains of the moat which we know surrounded the castle.

City Plan

It is often stated that 'Anjar is a similar development to Ramla so that whenever Ramla is discussed plans of 'Anjar are reproduced implying that they would have had a similar layout. However there is no archaeological evidence for this; the fact that they were founded at roughly the same time by similar patrons is no guarantee that they had identical plans. In fact comparison with other early Muslim foundations suggests that the plan of 'Anjar has more in common with the desert castles than with other urban foundations.

Conclusion

It can be seen that a large amount of information has been produced by the excavations (see **Table 33**) though there is little information that can be used to reconstruct the overall plan of the city in different periods. One possible approach is to asses the frequency of pottery from different periods in each location to give a rough indication of the area of settlement in different periods. Unfortunately the published reports to not give enough information on which to base statistical analysis and any assessments can only be of general guidance.

Despite these difficulties a few general observations can be made which may help in understanding the topography of the early Islamic and medieval city.

1) The natural ground level of Ramla is not flat as is often assumed but rather comprises a low hill which rises to a point of 14 metres above the surrounding plain (Petersen 2000). The two high points of the city are the area around the White Mosque and the area around the bathhouse (Hammam al-Ridwan) in the Old City. The ground level around the bathhouse is artificially high and excavations in the old city indicate that this is a result of occupation debris from the medieval period and earlier which has a depth of several metres. However in the area around the White tower the natural ground surface is fairly close to the present day surface (cf. Rosen-Ayalon and Eitan 1969, 4).
2) The most significant remains have been found to the east of the White Mosque (e.g. the al-'Anaziyya cisterns, the houses with mosaics and the medieval buildings of the old city).
3) The present-day network of streets, roads and lanes may reflect the layout of the city in earlier periods (for a discussion of the principles and techniques of this form of analysis see Lilley 2000, 7-15). Particularly important are the Jerusalem-Jaffa road which crosses the site from south-east to North west, the East-West street which passes in front of the White mosque and the South-North road which branches off from the south of the Jerusalem Jaffa road. A number of other routes may be added to these main roads by their alignment.
4) Excavations and monuments of known date may help determine the extent of the city in various periods. To this may be added place names which may preserve the location of some now vanished features. For example the area known as al-Muristan (the hospital) and indicated on Mandate period maps may be identified with the hospital known to have existed in the fourteenth century (see Burgoyne 1983, 259).
5) The layout of the early Islamic and medieval cities are likely to be different both in terms of size and orientation.

Using these points as guidelines it is possible to attempt a reconstruction of the layout of the city.

Early Islamic Period

Two reconstructions of the early-Islamic city are proposed, one on the basis of an orthogonal layout and the other with a more organic form (see **Fig. 60**). Both reconstructions are based on the same basic principles which is that the lay out of the present town preserves elements of the original town plan. The northern limit of the town is the al-'Anaziyya cisterns and the southern limit of the town is marked by Route 40. The western limit of the town is approximately two hundred metres west of the White Mosque and is marked by the double walls encountered by Glick (2000) during his excavations in 1992 (No.13 on Map). There are few indications about the eastern limit of the town although it is likely to extend at least up to the railway line. One of the main differences between the orthogonal and non-orthogonal reconstructions is the importance of the Jaffa road. If the orthogonal model is preferred the Jaffa road is a later feature which marked a route between city gates after much of the earlier city had been destroyed (i.e. after 1033 earthquake).

Crusader and Ayyubid Period

With the exception of the Crusader Church (and possibly the Greek Orthodox Church) there is very little within the town that can be dated to the Crusader period. However it is likely that the origins of the present day 'Old City' can be found in the Crusader settlement established in front of the castle in the early twelfth century. Unfortunately the Crusader castle was destroyed by Saladin in 1191 though some idea of its original position may be derived from an analysis of the contour plan of the old city (see above fortifications). It is noticeable that the suggested position of the Crusader castle lies on a similar alignment to the main axis of both the Greek Orthodox and the Crusader churches. In other words the area to the east of the suggested location of the castle contains at least two (three if the Armenian Church is included though this is probably of a later date) of the oldest Christian structures in the town in fairly close proximity. The fact that the Fransiscan convent is outside this area does not pose too much of a problem for, as Pringle (1998, II, 197-8) has shown, there is no evidence of a Fransiscan presence in Ramla before the late fourteenth century (i.e. during the Mamluk period).

Little is known about the Ayyubid town and there is little that can with any certainty be dated to this period with the exception of the inscription built into the maqam of Nabi Salih in the north west corner of the White Mosque. Mayer (1959, 116-7 A) thought that this must have come from another mosque elsewhere in the town and building on this Pringle suggests that it was originally from the Crusader Church marking its conversion into a mosque. However there is no evidence that the inscription had been moved and the fact that Mujir al-Din seems to have seen it in the White Mosque in the late fifteenth century strengthens the belief that it referred to a partial

rebuilding to the White Mosque[6]. In any case this would fit better with the historical evidence which states that after 1191 the town was under joint Crusader-Muslim control. It perhaps not too far fetched to suggest that the Crusaders retained control of their church and the surrounding area and the Muslims had control of the White Mosque and its neighbourhood.

Mamluk and early Ottoman Periods

The approximate size of the Mamluk town is much easier to define because of the buildings which are still standing and because it largely coincides with the limits of the present day 'Old City' (see **Fig. 61**). Confirmation for this assumption comes from the fact that medieval material is rare in excavations other than those within or on the edges of the 'Old City'.

The northern limit of the town is marked by the Jerusalem-Jaffa road, the ground level to the south being markedly higher than that to the north. The western limit is marked by the north south road (formerly known as Sharia' Deir al-Latin/ Street of the Latin Church) linking the Jaffa road to Route 40. Again the ground level to the west of the road is lower than that to the east. The southern boundary is more difficult to define precisely though on the assumption that certain buildings and places (eg. animal markets, cemeteries and the large Khan al-Idham) are more likely to be outside the walls than inside an approximate boundary can be drawn. The eastern edge of the town is marked by another north-south road connecting the Jaffa road to Route 40. It will be noticed that the alignment of the orthogonal reconstruction of the early Islamic city is different from that of the medieval city. It is also noticeable that there was some settlement outside the main town during the Mamluk period thus medieval pottery production appears to have taken place outside the north wall (No28 on map) and there is also some settlement around the White Mosque (see maps) as indicated in the sixteenth century Ottoman records.

The settlement around the White Mosque is interesting and requires some comment. As Mujir al-Din noted '...Of former constructions around the mosque there only remains a quarter adjoining it in the north side which is reduced to the state of a village. The city has thus become separated from the mosque (II 417-8)'. It may be that this quarter was a continuation of the settlement that had existed around the White Mosque since early Islamic times. However it seems more likely that this settlement was a consequence of the renovation of the White Mosque by Sultan Baybars in the thirteenth century. A similar situation may be noted in Safed where the Red Mosque is located away from the main settlement and formed the nucleus of a quarter. Evidence that the construction of these mosques was intended to stimulate urban development in hitherto neglected areas can be found in the establishment of Baybars' Mosque in Cairo. The mosque was built in the Husayniyya district of Cairo in an area which had previously been occupied by cemeteries and gardens. After the establishment of the mosque the area became the focus of settlement for refugees from the eastern Islamic lands (Maqrizi *Khitat* ed. edition. Maktabat al-Muthanna 2, 22)[7].

[6] See note (1).

[7] The fact that the inscription appears to have been seen by Mujir al-Din escaped Mayer's notice thus he states ' The building for which this inscription was originally destined cannot be determined; today it is not even known when it was placed in its present position' (1959, 117). See also Creswell (1959, 2, 142-77) and Bloom (1982).

12. CONCLUSION

Questions

In the conclusion I would like to return to the three questions posed in the preface- **1)** Was there a decline in the towns of Palestine under Muslim rule? **2)** Did a specifically Islamic form of town develop? and **3)** How can archaeology help in a discussion of urbanism?

Decline under Muslim rule?

The question of whether towns declined under Muslim rule is central to this thesis. Urban decline can be measured in a number of ways. The three most significant indicators are 1) the number of inhabited towns, 2) the urban population of a given area and 3) the physical condition of a town.

1) The first question is apparently the easiest to assess based on the figures cited at the beginning of this thesis the number of towns in Palestine declined from more than forty at the end of the Roman period to six at the beginning of the Ottoman period. Whilst this certainly indicates a significant decline in urban sites it is not as simple as it first appears. Firstly it should be noted that a number of the urban settlements listed by Jones can never have been much larger than villages and their inclusion in a list of urban sites should therefore be treated with some scepticism. For example he lists Gerar and Orda as towns even though there is little evidence that they ever functioned as more than estate centres[1]. A second problem with Jones' list is that some of the formerly important towns were no longer urban settlements by time of the Muslim conquests in the seventh century such as Antipatris (Neidinger 1987). One is then left with a number of towns which appear to have been in decline around the time of the Islamic conquest though the causes of the decline may have originated much earlier (eg Avdat). Finally one is left with a number of towns which declined during the period of Muslim rule. These can be placed in two groups, those which declined within a hundred years of the Muslim conquest and those which disappeared between the eleventh and thirteenth centuries. The towns which declined within a hundred years of the Muslim conquest include cities such as Sepphoris and Dor/Tantura where evidence for their existence in the Byzantine period has only recently been demonstrated indicating that evidence for a prolonged existence under Muslim rule may yet be found.

The second stage of decline, which appears to have begun in the late tenth century, can with some certainly be ascribed to the almost incessant warfare and uncertainties of the time. Palestine was not uniquely affected by this and there is considerable evidence for decline in the whole of Bilad al-Sham. For example Stefan Heideman has shown how the Numayrids used Raqqa as a nominal base though they remained nomadic (Heidermann 1999). It is probable that Ramla fulfilled a similar function for the Jarrahids in the early eleventh century (1010-13 AD) (Gil 1992, 577, 383). It also seems likely that the populations of many of the other Palestinian towns declined during this period and although they remained nominally urban they were essentially village type settlements on the eve of the Crusader conquest.

Despite this apparently disastrous situation more than 35 settlements in Crusader period Palestine could be considered urban (see Pringle 1997,3 Fig.1). However it seems probable that some of these were little more than villages (eg Mirabel, al-Bira, al-Ram,Bait Suriq, al-Qubaiba, Mi'iliya, Darum, Daburiyya, al-Zib, Qaqun, Qalansuwa) though the inhabitants had the status of burgesses. Even those sites which were ancient settlements seem to have become fairly small thus towns like Baysan and Tiberias contracted to a small core around the castle.

The end of Crusader rule was in most cases accompanied by widespread destruction of defences which further reduced urban settlements, most famously the systematic destruction of the coastal defences and ports of Ascalon, Jaffa, Arsuf, Caesarea, 'Atlit, Haifa and Acre. This was undoubtedly the biggest blow to the urban network and resulted in the collapse of the economies of inland towns such as Baysan and Qaimun. This summary indicates that the decline in the number of towns took place in main two stages, the first immediately pre-ceeding the Crusader conquest and the second immediately after the end of Frankish rule. Although in both cases the area was under Muslim rule in each case the causes are a result of external factors that have nothing to do with Muslim approaches to urbanism.

2) The second question, the urban population of a particular area is more difficult to assess given the nature of the evidence. Although we have fairly accurate historical records for the sixteenth century there is virtual no documentary records which allow one to make population estimates for earlier periods (with the possible exception of the Crusader period?). Unfortunately the archaeological record is also limited because in many cases we do not know the extent of a site during the period or if it was walled the percentage of the site which was inhabited at a particular time. Another problem is how we interpret archaeological evidence for example in seventh century Syria there is evidence for increasing subdivision of houses which may either be interpreted as a sign of decline in status/living conditions or perhaps as increasing population density. Even if it is possible to establish an estimate of particular urban population at one period of time the means for comparing this data with

[1] Some caution should be expressed here as there are other sites which are known archaeologically and appear to have the attributes of towns yet they do not appear in the historical sources (eg Khirbat Futais).

other data arrive at using different methods makes population comparisons extremely difficult. One further layer of complexity is that different populations/cultures may have different population densities. For example Redman (1986) discussing the Western Mediterranean uses a figure of 4.5 persons per Muslim household and 3.8 persons per household for Christian households. Of course using such figures in calculations pre-supposes a knowledge of the religious and ethnic composition of a town at a particular time.

In view of the above difficulties the only quantitative method used is estimating the population from the urban area at a fixed coefficient of one person per $10m^2$ (see **Table 34**). In the towns for which we have information there appears to have been a slight decline in urban size during the early Islamic period thus Jerusalem, Arsuf and Caesarea contracted to more or less their present size as indicated by the walled area. In some cases such as Tiberias there is indication of expansion from Byzantine times whilst at Ramla a substantial city was created presumably drawing at least some of its population from surrounding villages. As the inhabited areas of cities declined from the eleventh century inwards one would expect a decline in the urban population. Although there are a few cases of urban expansion such as Gaza or the new towns of Safad and Qaqun (also perhaps Majdal) overall there must have been a decline in the urban population under the Mamluks due to the destruction of the coastal cities. However, two considerations should be set beside this picture of demographic decline. The first is that the countryside of Palestine was considered an urbanised area in the medieval period (Lapidus 1969,67) and it is possible that the demarcation between town and countryside was not as severe as it may have been when towns were walled. The second consideration is that Cairo and Damascus developed as metropolitan centres possibly inhibiting the growth of other urban centres.

3) The third question, the physical condition of towns is amenable to archaeological investigation although the question of decline or otherwise can be subjective. One of the prime indicators of whether a town is in decline is the extent to which it conforms to a town plan. It is generally assumed that there is a hierarchy of urban design with the Hippodamian grid plan at the top and meandering narrow lanes with cul-de sacs at the bottom. As indicated in the introduction the former is regarded as a product of Western civilization whilst the latter is regarded as typical of the Islamic world.

The evidence from Palestine is hard to interpret partly because a large proportion of the coastal cities were destroyed and when excavated only small portions are available from which to extrapolate town plans. Ironically towns which still exist with considerable later occupation may provide more evidence of medieval towns than their abandoned counterparts due to the conservative nature of urban plans (see discussion of plan analysis in chapter 3).

First of all it needs to be stated that Roman/Byzantine towns were not always orthogonaly planned settlements and could be modified both by natural and earlier man-made features. For example the plan of Scythopolis is modified both by the natural topography and the tell which dominates the central area. Instead of a gird plan based on a cardo and decumanus there are two main streets which converge at a central area at the foot of Tell al-Husn. In other cases such as the towns of 'Isbaita or Umm al-Jimal the settlements developed in an organic way apparently independent of any central planning principles. In these cases the absence of a grid plan reflects the fact that these towns were not developed by the government but were spontaneous creations[2]. In fact the number of orthogonally planned Roman settlements in Palestine is relatively few and appears to be confined to new settlements such as Caesarea, Neapolis and Tiberias. Archaeological excavations at all three sites have confirmed that they were originally laid out on a grid plan which appears to have been a determining factor in subsequent development. The resilience of this plan has been demonstrated at Neapolis where the Roman grid plan is still evident. Another possible example of an orthagonally planned Roman settlement is Jerusalem which was re-founded as Aelia Capitolina in 130 AD. The town plan of the new city consisted of a main street (cardo maximus) a secondary cardo and a decumanus. As with Nablus it is striking how much of this plan is preserved in the present layout of Jerusalem.

Secondly it needs to be stated that many Islamic cities outside Palestine were built with orthogonal grid plans. The nearest and most clear example is the Umayyad city of 'Anjar in Lebanon which has a grid plan of almost military precision (**Fig. 15, Plate 2**). Although it is still in need of further excavation it is clear that the Abbasid city of Raqqa was also built to a grid plan. Later examples include the Seljuk city of Merv (Sultan Kala) founded in the late eleventh century (**Fig. 23**) (AD1072-92), Quseir al-Seghir (Morocco) founded in 1184 and al-Qahira (Cairo) founded by the Fatimids in AD 971. At Merv the original grid pattern of streets can still be distinguished in aerial photographs with the palace and later mausoleum of Sultan Sanjar at the centre (**Plates 7-8**). At Quseir al-Seghir the grid plan is visible in excavations though it was partially obscured by the later Portuguese town (Redman 1986). Interestingly there was a decline in the uniformity of the original twelfth century (Islamic period) plan in the Portuguese period. In particular the excavators state ' 64% of the domestic structures ... recorded from excavations had been sub-divided into smaller units during the Portuguese occupation, and in several cases open street or plaza space had been encroached upon by new buildings' (Redman 1986, 239). The evidence for al-Qahira as an orthogonal grid plan city has been presented by Rogers (1969) and Abu-Lughod (1971) though it should be pointed out that it was a palatine city not open

[2] In the case of Sbaita the design of the city may have been the result of calculations of water run-off and collection as indicated by the large cistern at the centre.

to the general public. Other cities incorporated elements of grids in their planning thus the Umayyad citadel at Amman has a grid plan adapted to the topography of the site (Northedge 1992). Similarly the Abbasid capital of Samarra includes large areas of housing built to a grid plan (see for example the Turkish cantonments of al-Karkh in Northedge 1994 Fig 51). Baghdad, however was built on a circular plan with radiating streets arranged in two concentric rings with the imperial mosque and palace at the centre.

As the majority of towns in Palestine were continuations of pre-Islamic settlements it is difficult to distinguish grid plans that can be dated to the Islamic period and those which survive from earlier times. For example it is not clear whether the layout of Umayyad Arsuf is a product of that period or whether it follows an earlier Roman/Byzantine layout. There are however a number of cases where it can be shown that the grid plan is a product of the Islamic period. The best known Islamic example is at Ayla/Aqaba which has a grid plan similar to that of 'Anjar though on a much reduced scale (**Fig.31**). Unfortunately very little is known of the layout of Ramla in the early Islamic period though the little information that we do have suggests that it was also built on a grid plan though not necessarily as rigid as that of 'Anjar. Some of the older towns have sections added in the early Islamic period which are built on a grid plan thus the area on top of Tell al Husn in Baysan was rebuilt on a grid plan in the Umayyad period. At Capernaum a new settlement built on a grid plan was established to the east in the Umayyad period (Whitcomb 1994, 25; Tzaferis 1989). If one accept's Harrison's argument Tiberias also had a new grid plan development in the Umayyad period. The evidence for Islamic grid planning is even more clear at Caesarea where a new quarter with a new grid plan was built in the Fatimid period (Raban 1998, 64-5). It is also likely that the new town built by the Fatimids at Haifa was laid out on a grid plan though there is no archaeological evidence of this. The limited information we have for new urban settlement in the medieval period suggests that grid plans were also used during this period thus the urban plan of Majdal (near Ascalon) appears to be based on a grid (**Fig. 48**).

However not all Islamic towns were based on a grid plan and there is evidence for other forms of urban planning. For example the earliest Muslim cities Kufa, Basra and Fustat were built on a system of tribal allocations of land (*khitat*) within the defined area of the city (see **Fig. 16**). Due to limited archaeological evidence it is not clear how this was expressed in a physical form. Akbar (1989) argues that the tribal allocations of land were themselves sub-divided into successively smaller units down to individual family plots. As each of these plots was determined by negotiation with competing groups Akbar suggests that the boundaries will have been irregular rather than fixed straight lines. Whilst Akbar's specific points on the nature of the *ikhtitat* (v. marking out) may be correct his conclusion that each *khatta* is an irregularly shaped unit is based on supposition rather than any evidence either physical or literary. (Contemporary practice in Arab countries such as Oman suggests that people tend to mark out rectangular or orthogonal units rather than amorphous areas). In any case descriptions of the early Muslim towns suggests that there were strong elements of central planning. For example Tabari describes the planning process at Kufa which had as its central element a square containing the mosque surrounded by a ditch from which five roads were marked to the north, four to the south (*qibla*) and three on the west and east sides (**Fig. 16**). The size of the roads was carefully regulated thus the main roads were forty cubits wide, the secondary roads thirty cubits, lesser roads twenty and the lanes seven cubits wide (Tabari ed.Guidi 4: 44; for a discussion of the origins of Kufa see Djait 1986). Whilst the individual units between the roads may not have been uniform in size there is no reason for them to be entirely irregular as Akbar suggests. It seems unlikely that Ramla, the only generally recognized new town in Palestine, was laid out in this way though elements of this system could have been employed for example the allocation of areas to different groups. The only other possible examples of this form of planning in Palestine may have been the camps at Jabiyya and Nicopolis-Emmaus though it is notable that neither of these later developed into towns.

One other form of planning is represented by Safed which was made into a regional capital under the Mamluks. Here the plan is dominated the local topography so that a concentric system of streets developed around the site of the castle following the natural contours (**Fig.43**). At Gaza the Mamluk and early Ottoman town developed outside the area of the Roman/Byzantine city and the main road (Via Maris) between Cairo and Damascus became the principal planning element (**Fig. 22**). A similar situation has been observed in sixteenth century Ottoman Damascus where Darwisiya Street as the starting point of the Hajj became the principal focus of urban development (Weber1997-8, 439-442; Roujon and Vilan 1997 and my review Petersen 2000).

Did the towns of Palestine become Islamic?

The extent to which the towns of Palestine became Muslim is important not only for its own sake but also as a test case for defining what is meant by an Islamic city. As indicated in chapter 2 the concept of an Islamic or Muslim city is something which has aroused considerable debate ranging from the stereotype Islamic city first postulated by Marcais to the assertion by Lapidus that towns do not exist in the Islamic world other than as large villages

The source of the problem is in trying to amalgamate two different concepts, Islam and city/town into a single definition. Thus the characteristics which define Damascus as a city are not the same as those which make it Muslim. Therefore two different sets of characteristics are needed, one defining its essential Muslim features and the other describing the necessary urban features.

There are two main characteristics one would expect of a Muslim town or city. The first is that the majority of the population should be Muslim. For most of the period under consideration the proportion of Muslims in a given town is pure guess work. This is particularly the case for the early Islamic period although it appears that the numbers of Christians and Jews in a given city were considerable and may often have exceeded the number of Muslims. The only really reliable information comes from the early Ottoman period when for the first time there is quantifiable demographic data (see Appendix1).

The second characteristic of an Islamic city is that it should be perceived to be of some importance in the Muslim consciousness by, for example, having a history of religious scholarship. Thus, Muslim historians and geographers describing a town will give lists of Muslim notables who lived there. For example Bradford has recently been described as a Muslim city (*Islamabad*) because it was the home of a prominent Muslim mystic (Lewis 2002, 1).

Neither of these criteria will necessarily have any impact on the layout or physical appearance of the city (although one would generally expect at least one mosque and a bathhouse) and are more readily identifiable through historical sources rather than archaeological documentation. However it is worth looking at physical aspects of the Palestinian towns under Muslim rule to see what influences or common features are apparent. I have divided this section into two parts, religious and secular, though the distinctions between these elements is not always as clear as one might expect.

Religious Structures

Mosques

The most obvious change to the appearance of cities was the mosque. For example in 951 AD al-Istakhri wrote that in the ninth century there were twenty mosques in Palestine compared with sixty churches (al-Istakhri ed de Goeje, 58). However our knowledge of early mosques in Palestine is very limited and only a few examples are known (Schick 1995, 140-1). The few mosques for which archaeological /physical evidence survives are small structures evidently only designed to accommodate a small population of Muslim believers (see for example mosque at Sbaita). Another interesting observation is that many of the early mosques known in Palestine are in the countryside thus although we tend to associate Islam with cities the physical evidence gives a clear indication that there was a significant Muslim population outside the cities. The fact that mosques have not been identified in towns where we know there was a Muslim presence may indicate that Muslims were using spaces to pray that were either not specifically Muslim or perhaps were not archaeologically recognisable as such[3]. We do have some archaeological evidence for re-use of churches as mosques thus King identified two churches in northern Jordan which had been converted for Muslim use by walling up the apses ' to negate the Christian direction of prayer that the apses indicated' (King 1983, 134). However it seems likely that in the majority of cases use of an area as a mosque is archaeologically invisible and certainly would not have made an impact on the visual appearance of a town or city. One of the problems identifying early mosques is that those built before 707-9 were not provided with concave mihrabs and thus there was little to distinguish them from secular structures[4]. In this context it is interesting to note that the early mosque (pre-750 AD) at Ayla/Aqaba has yet to be identified (Whitcomb 1997-8, 18).

There is slightly more evidence for mosques in the Abbasid and Fatimid periods (mid- eighth to eleventh centuries) although this is mostly documentary in form rather than archaeological. The evidence we do have indicates that congregational mosques were located in prominent positions in most of the main towns. This usually meant the main market. For example Muqaddasi's (ed. de Goeje 161) description of Tiberias includes a reference to the mosque that stood in the market place which had a courtyard paved with pebbles and was supported by composite stone columns. Unfortunately the location of the mosque is not known though it is tempting to speculate that it may have occupied the site of the Dhahir al-'Umar mosque built in the eighteenth century (for a discussion of this mosque see Bernie et al 1992). Baysan also had a mosque located in the market place though it is not clear whether this is to be identified with the small structure found during recent excavations or the Jami al-'Arbain which was rebuilt in the nineteenth century (**Plate 16**). Muqaddasi indicates that the Friday mosque in Ascalon was located in the cotton market though the only mosque remains identified at the site belong to a building converted from a Greek Orthodox sometime in the tenth century (Stager 1991, 62)[5].

In other cases the congregational mosque was located in an elevated place and clearly had a visual impact on the urban skyline. Thus Nasir-i-Khusraw's (ed Scheffer, 62) description of the Caesarea mosque in 1047 indicates that it overlookied the sea.

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[3] cf. Insoll describing the Cambridge mosque 'How would the archaeologist define this structure in the form it is today 200 years hence? ...levelled to its foundations...only an empty space with an east west orientation would remain...differentiating it little from any other hall. In this respect, it provides a sobering reminder of what can elude the archaeologist' (1999, 58).

[4] The first concave mihrab was introduced when al-Walid rebuilt the mosque of Medina in 707-9. Confirmation of the absence of concave mihrabs in early mosques is provided by the excavation of the mosque at Wasit where the earliest phase of the mosque had no mihrab (Creswell 1989, 40-1 & 46).

[5] Stager (1991, 62, n.38) identifies this building as St.Mary the Green based on very little evidence. However, it is known that a number of mosques were converted into churches after the city was occupied by the Crusaders (Pringle 1993,63-4 no. 14 and 68 no.15).

Remains of this mosque have recently been identified by Pringle (1993-I, 170-1), confirming that it had a central elevated location in the city. Similarly we also know that Jaffa had a mosque in a prominent position overlooking the sea (Muqaddasi ed. de Goeje 174). Muqaddasi also informs us that Arsuf had a congregational mosque which contained a minbar originally made for the mosque in Ramla but was considered too small.

The most noticeable difference between the Islamic period before the Crusades and the period following is an increase in the number of mosques in towns and cities (see **Tables 2** and **3**). This is a feature that is not unique to Palestine and has also been observed in Syria, Egypt and elsewhere. This process appears to have begun as early as the tenth century, thus Muqaddasi (ed. de Goeje 161) mentions that Tiberias had two mosques, the mosque in the market and the Jasmine mosque. Under the Ayyubids this process was checked as their adherence to the Shafi rite meant that they only allowed one Congregational mosque in an urban area (Behrens-Abouseif 198911,15). Thus even a city as large as Cairo only had one congregational mosque (the mosque of 'Amr at Fustat). Under the Mamluks, however, the multiplication of mosques resumed and different mosques were established for each area of a town whilst khanqas and madrassas also took on the function of Friday mosques (Behrens-Abouseif 1989, 15). For example Mamluk Gaza had more than thirty-five mosques of which at least four were congregational mosques (*jawami*)(**Fig.22**)(Sadek 1991,46-219 & 294-323). In this context the number of mosques is some indication of the Muslim population of a town. Thus towns with only one congregational mosque such as Yibna were presumably less populous than those with several such as Ramla which had ten *jawami* of which at least four were congregational mosques (**Fig. 61**) (Petersen 1995, 78).

From the above discussion it is clear that although the city centres contained mosques in the pre-Crusader period the diffusion of mosques into the city fabric did not occur until the Mamluk period when, according Behrens-Abouseif, each quarter and even each street had its own [Friday Mosque] (Behrens-Abouseif 1989, 15).

Minarets

Concomitant with this proliferation in the number of mosques there were also developments in their architectural appearance most of which are beyond the scope of this thesis. However a development of primary importance to the visual appearance of mosques and hence their role in the urban fabric was the development of the minaret.

Minarets are now regarded as a defining feature of Islamic cities though their origins are relatively late. Although the mosques of Damascus, Fustat and Medina had towers during the Umayyad period it is now generally agreed that the minaret was an introduction of the Abbasid period (750 AD). However the Fatimids did not accept this symbol of Abbasid authority and early Fatimid mosques did not have minarets[6]. The importance of this for Palestine is that the appearance of towns in the Mamluk era is likely to have been very different from the same towns before the twelfth century. The proliferation of minarets after the Muslim re-conquest of Palestine were probably part of a programme of visually marking Muslim space[7]. It is noticeable that during this later period (mostly Mamluk) religious buildings other than mosques had attached minarets indicating their role of identifying Muslim buildings.

The propaganda value of minarets can most clearly be seen in the minaret of the White mosque in Ramla which was rebuilt in 1307. The cost of rebuilding the minaret must have been enormous and it appears to have been responsible for extensive stone robbing of earlier structures in the vicinity of the mosque. However the height of the minaret (30 metres) meant it was visible from the sea over 15 kilometres distant (Heyd 1956, 208). The architecture of the building so impressed European travellers that they assumed it was a Crusader construction. Minarets were also built at the corners of the Haram in Jerusalem and the Haram in Hebron to indicate that these shrines were now under Muslim control.

Shrines

Whilst mosques are an indication of the presence of a Muslim population in a town the construction of shrines is a way of establishing a Muslim past thereby enhancing the legitimacy and authority of the religion (see for example Jalabert 2002 who describes the growth in the number of Muslim shrines in Damascus). The importance attached to the establishment of Muslim shrines can be seen by the construction of the Dome of the Rock as early as 691 giving a Muslim dimension to a city with deep religious significance to the two rival faiths of Christianity and Judaism. However in the other cities of Palestine there were few notable Muslim shrines established during the early Islamic period despite the fact that the Umayyads propagated *hadiths* sanctifying the various towns of Palestine (Khamis 20001, 174 notes 50-52 and Gill 1992, 10-1). Even Hebron, the burial place of Abraham, the father of the religion, seems to have attracted little attention as a Muslim shrine (cf. Le Strange 1890, 151).

The real growth in the number of Muslim shines in Palestine appears to be a product of the post Crusader period and may be seen as part of a spiritual re-conquest and a reaction to the large number of Christian shrines which had developed during the years of Crusader control. Jerusalem, of course was of particular importance

[6] For a full discussion of the origin of minarets see Bloom (1989) and for a contrary view see Hillenbrand (1994, 129-171 esp pp.137-8).

[7] cf C.Hillenbrand 1999, 129 'These monuments [minarets built by Nur al-Din], towering over cities and fortresses, had a strong propoganda message testifying to the triumph of Islam'.

during the period of the counter-Crusade (cf. C. Hillenbrand 1999, 150-161) and during the Mamluk period developed an elaborate network of shrines in addition to the Dome of the Rock. Other cities which were previously of little religious significance became populated with Muslim shrines thus Ibn Battutah who visited Ramla in 1355 mentions the shrines of more than three hundred prophets in Ramla (cf LeStrange 1890, 150). Despite the fact that Ramla had suffered considerable decline in both its urban area and its secular importance it had acquired significant religious significance as a symbol of former Muslim grandeur and as a centre of Muslim culture. Although Ibn Battutah's description of more than 300 shrines may be exaggerated the number of extant shrines in the city clearly indicates its religious significance in the post Crusader period. Although Muslim shrines were not an exclusively urban phenomenon (they are found in many parts of the Palestinian countryside) it is significant that during this period all the towns of Palestine developed Muslim shrines. Even newly established towns quickly established Muslim shrines thus in Safed the Mamluks established a shrine known as Mugharrat Banat Ya'qub (The cave of the daughters of Jacob) which contained a shrine, a mosque and the tombs of Mamluk governors of the town.

The role of shrines as a means of Islamicizing urban areas did not stop with the transfer to Ottoman rule in the sixteenth century and according to Layish (1987, 69) and Cohen (1978, 32-3) it appears to have intensified. Thus in the early years of Sulayman's rule Christians were gradually moved away from the area of David's tomb until 1549 when the Christians were finally expelled and the tomb became the centre of a Sufi *zawiya* (see also Özaslan 1999 where he describes how the development of the shrine of Ayyub al-Ansari was part of a process of converting Constantinople into a Muslim city).

Secular Buildings

Palaces

Although palaces are often regarded as one of the principal forms of Islamic architecture only three examples survive in Palestine and of these only one, that of Jerusalem, is located in an urban context. Whilst it might be argued that the other two palaces Khirbat al-Mafjar and Khirbat al-Minya were built as the nuclei of proto-urban foundations in reality neither can be said to have been part of the urban fabric. In addition to Jerusalem we know of two other early Islamic urban palaces from literary sources, the palace at Acre and the Dar al-'Imara at Ramla. The Umayyad palace at Acre was built by the governor of al-Urdunn province Ishaq ibn Qabisa during the reign of Hisham and was decorated with a glass mosaic inscription (Khamis 2001, 170). No trace of the palace has survived nor do we know anything of its location. Although it is known that Ramla had a governor's palace or Dar al-'Imara the location of this building has not been identified though it seems reasonable to assume that it was seen, and probably behind, the White Mosque[8]. Unfortunately this area is now a graveyard and is off limits to archaeological excavation (the nature of the ground surface also makes geophysical prospect ion impracticable). However surface finds within the graveyard including large fragments of marble, glass mosaic tesserae and early Islamic ceramics lends support to the theory that the palace was located here.

In the period following the Crusades the citadel appears to have been replaced by the palace as the administrative centre of urban life (see for example Merv **Fig. 23**). The main difference between the palace and the citadel is the latter's emphasis on fortification. Examples of towns with citadels in the medieval Islamic period include Safed, Baysan, Jerusalem, Qaqun and 'Aqaba/Ayla. The one surviving example of a palace which is not fortified is the Governors' palace in Gaza (Sadek 1991, 268-82).

Administrative Buildings

With the exception of palaces very few secular non-domestic buildings have been identified from the early Islamic period. There have been some attempts to identify administrative components of early Islamic cities such as Whitcomb's discussion of the *diwan* (Whitcomb 2000) though in general little is known about the archaeology of such buildings. In any case it is likely that the architecture of administrative buildings may not have differed much from the more expensive domestic buildings and therefore they would be difficult to distinguish one from the other.

There is, however, a group of buildings which are fairly well represented in the archaeological record which may have some administrative functions. These are courtyard buildings with mosaic paved rooms. An example of such a building, known as the House of the Mosaics, has been described by Pentz (1997, 96-7) at Hama and has tentatively been identified as an Umayyad reception building. Although this building appears to have been built before the Arab conquests it was extensively refurbished (including figural stucco and frescoes) during the Umayyad period. Buildings of a similar type decorated with mosaics have been identified at a number of other sites in Palestine including Bir Saba, Baysan, Ramla and it is tempting to see them fulfilling some official function. Significantly none of these towns has any other remains which could be identified as official buildings from this period. The building at Bir Saba is particularly interesting because of its central location near to the bath house which was probably still in use (c.f. Whitcomb 2000, Fig.1 Model for early Islamic development of Ayla where bathhouse is located next to the palace.). In view of the dispersed nature of early Islamic Bir Saba the presence of a bathouse and

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[8] It is for example known that in the summer of 902 AD the Fatimid *mahdi* and his son al Qa-'im stood on the roof of the governor's house in Ramla to watch falling stars (Gill 1992, 466 n.81).

'mansion' at the centre gives more support to its identification as an urban centre.

At Baysan there appears to be a similar spatial relationship between a mosaic building with hypocausts (cut by the moat of the Crusader citadel) and a high status building also with mosaics located near the later Ottoman *serai*. A number of other early Islamic buildings decorated with mosaics were uncovered further east though their location suggests that they may have been 'luxurious residential dwellings' rather than administrative buildings.

Apart from the Dar al-'Imara, which has not been found, the remains of two buildings with mosaics have been located in Ramla. It is possible that either or both of these buildings could have served administrative functions as both are located within a few hundred metres of the White Mosque.

Bathhouses

As indicated in the introduction bath houses have become almost synonymous with the idea of Islamic urbanism. Although Classical and Byzantine cities had bathhouses, their general absence in the Christian Western Europe has meant that in the medieval and later periods they are regarded as an almost exclusively Muslim phenomenon. The fact that Crusader cities such as 'Athlit were equipped with bathhouses may be an indication of Muslim influence rather than an aspect of western urbanism.

It is notable that bathhouses are associated with most of the Umayyad palaces and the association between rulers and bath houses, later became a factor in most Islamic cities. The fact that bathhouses are extremely rare in non-urban environments further strengthens their credentials as an indicator of urban status.

Fortifications

The possession of town walls has often been regarded as an indication of urban status although they are neither necessary nor sufficient as there have always been towns without walls and walled villages. Nevertheless town walls are often an important feature of pre-modern towns providing status and demarcation of the urban boundary as well as their more obvious defensive function.

On the eve of Islam several towns were enclosed with walls whilst others were apparently undefended. Towns which are known to have had walls in the Byzantine period include Gaza, Ascalon, Caesarea, Scythopolis, Jerusalem, Ayla/Aqaba and Tiberias. Those without walls include Beersheba, Lydda and Nazareth. Many of the walls appear to have been fairly flimsy thus the wall around Caesarea was a low built on sand dunes whilst the walls of Gaza were rapidly strengthened before the first Muslim attacks (Kaegi 1992).

During the early Islamic period the main focus of urban fortification was the coastal towns which were given the status of *ribatat* (frontier towns) and were often referred to as fortresses rather than towns. Both Caesarea and Arsuf were enclosed by walls in this period. Arsuf appears to have been unwalled until the Umayyad period when the first fortifications were built. At Caesarea the Fatimid period walls covered a smaller area than the earlier Byzantine walls but were better built. In some cases fortifications took other forms thus Minat Isdud had a fortress and a number of watchtowers built in the Fatimid period. The situation inland is less clear though in general it appears that Byzantine walls continued to be maintained though at Jerusalem there was a reduction of the walled area to more or less the present wall line. In addition to walls enclosing whole towns there are a number of cases where part of cities were contained within walls thus both Baysan and Aqaba/Ayla (possibly also Tiberias) had separate walled sections for the Muslim community.

Ramla, the only new town created in the Umayyad period, is generally assumed to have been enclosed by walls though the early descriptions refer to gates rather than walls and the first description of the walls dates from the eleventh century. It is possible that the city was initially unwalled and one recalls the fact that town walls were not a feature of the first Islamic cities thus neither Basra, Kufa nor Fustat were enclosed by walls and only marked by ditches. On the other hand Wasit, which was founded by the Umayyads at the beginning of the eighth century (and therefore roughly contemporary with Ramla) was enclosed by a defensive system which included two ditches and a curtain wall (Yakut ed. Wüstenfels IV, 682-4). The difference is that the early *amsar* were built when Islam was in its first wave of expansion whereas Wasit was built to control the populations of Basra and Kufa. It is not clear where Ramla fits in as it appears to have been primarily a civilian settlement though the recent discovery of a section of double wall suggests that it was fortified from the beginning.

Unfortunately very few of the early Islamic fortifications have survived despite the fact that they were utilised by the Crusaders. The reason for this is of course the destruction during the Crusader wars and subsequent demolition under the Mamluks. The only known examples of medieval Islamic city walls in the area are the Fatimid walls at Ascalon and the Ayyubid walls of Jerusalem. Unfortunately is difficult to identify the Fatimid components of the Ascalon walls and the walls of Jerusalem erected during the reign of al-Mu'azzam 'Isa were subsequently destroyed by him[9]. Under the Mamluks none of the Palestinian towns were fortified with walls though they were often protected by citadels. Usually the citadels were located within the city though

[9] The policy of leaving Jerusalem un-walled to prevent the capture and subsequent use as a fortifications is a policy initiated by al-Mu'azzam 'Isa and later adopted by the Mamluk rulers.

occasionally as at 'Ajlun the citadel was located at some distance from the town.

The rebuilding of Jerusalem's walls under the Ottomans was significant for a number of reasons. Firstly it signified a reversal of the policy started by al-Mu'azzam 'Isa in the thirteenth century indicating that the new rulers were confident of their control. Secondly they were an advertisement for Ottoman rule signifying a new care for the area. Thirdly the walls had the practical role of defending against Bedouin attacks and as such were part of a strategy which also saw the construction of fortresses at Bayt Jibrin, Hebron, Ras al-'Ayn, Qal'at Burak and Jenin.

Suburbs

Most pre-modern towns had suburbs which could either be walled or un-walled. There are no examples of walled suburbs that have survived from Palestine though examples form elsewhere might include the two *rabads* (suburbs) to the north and south of Sultan Kala in Merv were enclosed within walls.

It is generally assumed that suburbs developed to house excess population that could not be accommodated within the walled area of a city due to lack of space. However there are many cases where there are empty intra-mural areas whilst suburbs developed outside. One of the clearest examples is the ancient city of Merv (Gyaur Kala) where the occupied areas within the walls survive as a large irregular shaped tell with unoccupied corners yet the adjacent un-walled area to the west (later to become Sultan Kala) developed as a suburb from the eighth to the eleventh centuries. Within the Palestine the most obvious example is Jerusalem which even today has areas within the walls that are undeveloped (e.g. large parts of the Armenian Quarter in the south-west and parts of the Muslim quarter in the North east) and extensive suburban villages.

An alternative proposition is that suburbs developed to house those who were excluded from the town. An example from medieval Britain is the town of Havefordwest where the Welsh were excluded form the walled town and formed their own suburb (Prendegast) to the north of the town (Lilley 2000). A similar situation may have existed in Bilad al-Sham in the late Classical period thus a number of cities such as Hama and Aleppo had extra-mural areas originally occupied by Bedouin (sing. *al-Hadir*) (Pentz 1997). According to Sauvaget these places subsequently became the areas favoured for settlement by the Muslim Arab troops (Sauvaget 1941, 63). Unfortunately it has not been possible to identify suburbs of this type in Palestine though it is noticeable that in fourteenth century Hama this became the largest part of the town (Pentz 1997, 96).

A related phenomenon is where a new specifically Islamic quarter is annexed to a pre-existing town. Examples from elsewhere in the Islamic world include the *misr* of Mawsil (Mosul) built on the east bank of the Tigris opposite the ancient city of Nineveh ('Athima 1986, 191-2) or the city of al-Rafiqa built as a suburb of the classical city of Nicephorium (Northedge 1994). In each of these cases it is debatable whether the new quarter is a suburb of an old town or the main part of a new town. Examples from Palestine include the early Islamic *misr* at Ayla built next to the Byzantine walled town and putative *misr* at Tiberias built to the north of the main Romano-Byzantine town. At Baysan the problem becomes more complex when a walled Islamic residential compound is developed within the city walls leading to the paradox of an intramural suburb.

It could also be argued that Lydda became a suburb of Ramla after the foundation of the latter though this is unlikely due to the fact that each settlement retained its separate spatial identity. However archaeological excavations have certainly identified early Islamic suburban settlements at Ramla (see for example Sion 2000). The contraction of the city under the Crusaders meant that the Mamluk city became separated from the area of the White Mosque which then took on the character of a suburb of the later medieval city. However the clearest example of Mamluk suburban development can be seen at Gaza where the centre of the town was located on the tell and new developments were built below to the south on an area bordering the Cairo-Damascus road.

In towns where there were apparently no walls such as Beersheba the demarcation between the town and suburban developments is sometimes difficult to distinguish even though a core area can be recognised. A related problem is distinguishing between suburban developments and neighbouring villages, for example at Ayla/Aqaba there are a large number of related sites stretching over an area of several kilometres. Although these settlements are not contiguous with each other or the main town they are clearly dependant on Aqaba/Ayla. In both these cases we are dealing with a dispersed oasis type settlement which clearly has an urban character even though individual units are separated from one another (The recognition of this form of settlement as urban was first made by Lapidus (1969, 68) in relation to Iran when he states 'whole regions may be imagined as composite 'cities' in which the population was divided into non-contiguous spatially isolated settlements).

What is the role of archaeology?

It can be seen from the previous chapters that the archaeological evidence for towns in the Muslim period is very patchy and depends on having appropriate historical information as well as comparative material from elsewhere. However, in some places, archaeology provides the only evidence thus there is virtually no mention of Beersheba in the historical sources yet excavations indicate a considerable sized settlement in the Umayyad period. Where the opposite applies and there is historical evidence for settlement but no

archaeological remains, as is the case with Sepphoris, it can be assumed that either the appropriate areas have not been investigated or that the interpretation of remains needs refinement. In the case of Sepphoris the archaeologists admit that the Byzantine area has only recently been identified and it is not unlikely that an early Islamic phase might be identified in the future (particularly since some of the specialist reports refer to early Islamic and Mamluk period material).

There may also be practical problems of identifying Islamic-period material, thus the upper layers of a site will often be removed mechanically meaning that later remains are artificially truncated. Another problem is that a large number of buildings, particularly on the coast were built of mud brick yet there are few published examples of mudbrick structures dating to the Islamic period. It is for example noticeable that at Ramla only the stone foundations of walls were found. Another consideration which should be borne in mind, particularly when considering the old classical cities, is that many structures were continuously inhabited and therefore transition to a later Islamic phase may become archaeologically invisible[10].

Another feature of archaeological evidence which is worth discussing is the differing excavation strategies. Three strategies are used for urban sites these are research, clearance and rescue excavations. In general research and clearance excavations are concerned with sites that are no longer inhabited whilst rescue excavations generally take place in built up areas. The advantages of research and clearance excavations such as those carried out at Baysan is that large areas are excavated and specific periods or features are studied in detail. The disadvantage of such excavations is that certain periods are preferred over others (generally Classical period) and that there is a tendency to concentrate on public buildings. Rescue excavations also have their disadvantages such as inadequate publication and synthesis and a tendency for features to be poorly understood. However there are advantages to rescue excavations for considering the Islamic period of a city. The first of these is that by their nature rescue digs are not concerned with specific periods and therefore will tend to record all information regardless of its date. Secondly rescue excavations are essentially random in their selection of locations thus different parts of a city will be identified instead of a concentration on central public buildings (cf. Redman (1986, 180-187 esp. 181) who used random sampling to select excavation units and found that 3% of the site was occupied with public buildings rather than 26% using selected excavation units). The advantages of such random sampling are particularly apparent when looking at the excavation results from Beersheba, Eilat (for Ayla/Aqaba) and Ramla.

Summary

A decline in the cities of Palestine from the beginning of the Islamic period to the end of the sixteenth century is undeniable whether it is seen in terms of absolute numbers or population (the question of layout is more debatable and has not been proven). However this overall view masks the fact that the decline was patchy and took place in different places for different reasons. For example the decline of urban settlement in the Negev within the first four centuries of Islam is very noticeable even though the causes are poorly understood. On the other hand the decline in coastal settlement was part of a deliberate policy which was a direct reaction to the Crusader conquests of the eleventh, twelfth and thirteenth centuries. In Eastern Galilee a number of factors including invasions by Khwarzmians, Crusaders and Mongols caused a disruption to the settlement pattern. What is clear from these examples is that there is no single cause for urban decline such as the advent of Islam.

Absolute numbers are difficult to determine but the total population (urban and rural) at the end of the period (i.e. C16th) appears to have been close to the total carrying capacity of the land and not far off that achieved in the Byzantine period if one excludes the areas brought out of settled cultivation (e.g. Negev and the coast). This raises the question of whether the decline in urban population was really part of a long term process by which a greater proportion of the population were settled in villages.

The Islamicization of towns and cities is a more complex phenomenon because it is a cultural phenomenon which is difficult to asses even in the modern world. However it is clear that the visibility of Islam increased significantly from the seventh to sixteenth centuries. Although the idea of a typical Muslim city has largely fallen out of favour (for reasons outlined in Chapter One) certain associations of buildings appear to be characteristic at different periods; for example in the early Islamic period the Great Mosque is often next to the governor's palace (e.g. Kufa, Caesarea?, Ramla?) or it is located in the main market (Ascalon, Tiberias, Baysan). During this early period a single congregational mosque was a sufficient indicator of an 'Islamic town' (i.e. within the Dar al-Islam) whilst the rest of the town may have differed little from that of the Byzantine era. In the medieval period the Great Mosque becomes the focus for other Muslim institutions including libraries, *zawiyas*, *khanqas*, *madrassas* and mausolea. In addition smaller neighbourhood mosques developed to cater for different parts of the city.

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[10] See for example Pentz's discussion of the change from Byzantine to Muslim rule in Hama 'To summarize, the character of the Arab conquest makes it understandable that there is only little archaeological evidence of the take-over of Hama'. Later in the same chapter he gives more details 'In Apamea ... during the early seventh century the houses...underwent a kind of transformation, their halls were divided up....doors were blocked and badly built walls erected here and there.... This seems not have happened at Hama, at least so far as can be deduced from the archaeology, on the contrary it appears that complexes were unaltered and left free of re-furbishments' (Pentz 1997,94-5).

The archaeological study of Muslim cities is still at an early stage. Although significant work has been carried out (e.g. 'Aqaba, Hesban and 'Amman) much still needs to be done to elucidate the Islamic phases of urban sites in Bilad al-Sham and in particular Palestine. It is only when we have more and better quality data that we will be able to really challenge the underlying prejudices and assumptions which cloud our perception of the Muslim periods. There has already been considerable progress in modifying the view of primitive Arab tribesmen destroying the civilization of the Middle East (the Dome of the Rock on its own should challenge such assumptions). It is hoped that in this work I have been able to push the argument further and show that the decline and rise of cities is a complex process (involving movements of people, natural environment, culture, trade routes and politics) in which religion is one of a number of factors. This is not to diminish the role of religion but rather to suggest that it is a clothing of the city rather than the city itself.

TABLE 30 Size and Population estimates from Byzantine to Early Ottoman Times.

Name of Site	Period	Size in hectares known from archaeological sources	Population estimate from area of site at one person per 10^2 m	Population from documentary sources	Size in hectares estimated from population
Ascalon	Early Islamic-Crusader	60 ha.	*6000*	?	
Ashdod Yam/ Minat al-Qala'	Byzantine-Early Islamic	40 ha.	*4000*	?	
Baysan	Byzantine-Umayyad Period	134 ha.	*13400*	?	
	Abbasid-Fatimid	?		?	
	Crusader	?		?	
	Mamluk	?		?	
	Ottoman	?		210 [A]	*2.1 ha.*
Caesarea	Byzantine -Umayyad	80 ha.	*8000*	?	
	Fatimid-Crusader	11.25 ha.	*1125*	?	
Elusa/Khalasa	Byzantine	52.8 ha.	*5280*	?	
Sbaita/Shivta	Byzantine-Early Islamic	11 ha.	*1100*	?	
Mampsis	Byzantine	4 ha.	*400*	?	
Nessana	Byzantine-Early Islamic	15-18 ha.	*1500-1800*	?	
Ruheiba	Byzantine	12 ha.	*1200*	?	
Tiberias	Byzantine	112.5 ha.	*11250*	?	
	Early Islamic	124.5 ha.	*12450*	?	
	Crusader	8 ha.	*800*	?	
	Ottoman	?		270 [A]	*2.7 ha.*
Nazareth	Ottoman	?		1515 [A]	*15.15 ha.*
Saffuriyya	Ottoman	?		2000 [A]	*20 ha.*
Arsuf	Byzantine –Fatimid	24 ha.	*2400*	?	
	Crusader	8 ha.	*800*	?	
Jerusalem	Early Islamic-Fatimid	120 ha.	*12000*	?	
	Crusader- Ottoman	86 ha.	*8600*	4670-13070 [B]	*46.70-130.7 ha.*
Nablus	Mamluk/Ottoman	36 ha.	*3600*	3815-5495 [B]	*38.15-54.95 ha.*
Qaqun	Ottoman	?		115 [A]	*1.15 ha.*
Acre	Crusader	51.5-85.5 ha.	*5150-8550*	?	
Jaffa	Fatimid and Crusader	7 ha.	*700*	?	
	Ottoman	?		75 [A]	*0.75 ha.*
'Atlit	Crusader	9 ha.	*900*	?	
Ramla	Early Islamic – Fatimid	256 ha.	*25600*	?	
	Crusader-Mamluk/Ottoman	33.75 ha.	*3375*	1415-3050 [B]	*14.15-30.5 ha.*
Beersheba	Byzantine and Early Islamic	100-150 ha.	*10,000-15,000*	?	
Aqaba	Byzantine	18 ha.	*1800*	?	
	Early Islamic	24.25 ha.	*2425*	?	
	Mamluk/Ottoman	?		?	
Gaza	Byzantine-Early Islamic	36 ha.	*3600*	?	
	Mamluk/Ottoman	50 ha.	*5000*	4505-11,120 [B]	*45.05-111.2 ha.*
Safed	Mamluk/Ottoman	50 ha.	*5000*	4630-9655 [B]	*46.30-96.55 ha.*
Majdal	Mamluk/Ottoman	50 ha.	*5000*	2790[A]	*27.9 ha.*
Al-Bira	Crusader	9 ha.	*900*	500-700 [C]	*5-7 ha.*
	Ottoman	?		225[A]	*2.25 ha.*

References: A = Hütteroth & Abdulfattah 1977, B = Cohen & Lewis 1977, C = Pringle 1997, 3 & 35-6

APPENDIX 1

Table 1 – Beersheba Excavations

No.	Location	Date	Excavators	Features	Finds	Periods	References	No. on Map
1	Beersheba 130 072	1967	Israeli	Church (inc. standing remains)	Pottery & coins	Byz-Umayyad	Israeli 1968, 415-6	8
2	Beersheba 1300/0715	1967	Israeli	3 subterranean rooms with mosaic inscription	Pottery	Byz-early Islamic	Israeli 1968, 415-6	11
3	Shikun Dalet, Areas A & B 1315/0714	Jan- April 1968	Cohen	Built tombs, cisterns, house with 6 rooms & pottery kiln	Pottery & inscribed cross	C5th-6th & 'Somewhat later'	Cohen 1968	1
4	Industrial Zone, Areas A & B 1318/0725	Jan- April 1968	Cohen	60+ tombs & two large structures	Inscribed cross & wooden coffins	C5th	Cohen 1968	14
5	Bedouin Market	Jan- April 1968	Cohen	Building with 7 rooms one with figural mosaic floors	?	Byzantine	Cohen 1968	? (same as 12?)
6	Beersheba 1313 0746	1971	Cohen	2 room structure & furnace	Pottery	C6th-7th	Cohen 1972, 41-2	2
7	Bedouin Market 1306/0719	Nov-Dec 1986	Govrin	Atrium of mansion with figural mosaic	?	'Byzantine-early Arab period'	Govrin 1990	12
8	Central bus station	1987 & 1988-9	Govrin	25 graves	?	Byzantine C 5th -6th	Govrin 1991	16
9	Beersheba 1307/1722	1987-9?	Govrin	Walls, pits & subterranean structures	?	'Byzantine'	Govrin 1991	17
10	Ramot Nof Area B1 13120/07625	Feb-May 1991	Ustinova & Nahshoni	Large building	Pottery, metal objects and glass	Byz-early Islamic	Ustinova & Nahshoni 1994, 157-8	3
11	Ramot Nof Area D 13150/07520	Feb-May 1991	Ustinova & Nahshoni	Courtyard building	Pottery, tabun & glass	Late Byz-early Islamic	Ustinova & Nahshoni 1994, 158-60	4
12	Ramot Nof Area E 13100/07570	Feb-May 1991	Ustinova & Nahshoni	Courtyard complex	Pottery & glass	Late Byz.	Ustinova & Nahshoni 1994, 160	5
13	Ramot Nof Area G 13120/07530	Feb-May 1991	Ustinova & Nahshoni	Cistern	Pottery	Late Byz-early Islamic	Ustinova & Nahshoni 1994, 160	?

Table 1 continued – Beersheba Excavations

14	University Campus 1318/0751	Dec-Jan 1991	Nimrod Negev	8 buildings including silos and cisterns	Pottery (inc. lamps), millstones, stone tools, iron nails, coins, blocks of sulphur	Early Islamic	N.Negev 1993	6
15	Nahal Koshevim 13092-13135/ 07520-07625	Feb-May 1991	Nahshoni, Ustinova & Bar Zvi	Building	Pottery	Byz	Nahshoni, Ustinova & Bar Zvi 1993	?
16	Nahal Beqa' 1 13022/07059	Feb-March 1991	Katz	Structure	Pottery	Late Roman-early Islamic	Katz 1993	19
17	Horvat Matar 1284/0714	Dec 1990-April 1991	Gilead, Rosen & Fabian	i) monumental building & ii) farmhouse	Pottery	i) C5th-7th ii) C7th	Gilead, Rosen & Fabian 1993	20
18	Ramot B 1322/0753	May-June 1991	Katz & May	Farmstead	Pottery inc. tabun	Byz-early Islamic	Katz & May 1998: Ilan 1980	7
19	Beersheba Wholesale market	Sept 1992	Fabian & Rabin	Courtyard building (same as 4?)	Pottery	Byz & early Islamic C7th-8th	Fabian & Rabin 1996	18
20	Old Town	1992June-July 1996	N.Negev	Bath house	Pottery	Byz <u>or</u> early Islamic	Negev 1994: Abel 1903	9
21	Ministry of Health 13000/07246	June-July 1996	Ein-Geidy & Masarwah	Army camp with later features	Pottery & coins	Late Roman-Byzantine	Ein-Geidy & Masarwah 1999: Fabian 1995	10
22	New Bedouin Market	Dec 1996-Jan 1997	Shimron-Vadaei	?	Pottery	Byz. & early Islamic	Shimron-Vadaei 1999	13
23	Civic centre 12955-13085/07120-07289	Nov. 1995-April 1996	Varga	Cemetery	Glass, fabric, beads, limited pottery	Roman-early Islamic	Varga 2000	14
24	Ha-Palamh St. 130025-130045/ 071220-071235	August 1998	Fantalkin	building	pottery	Byz-early Islamic	Fantalkin 2000	?

Table 2 - Baysan/Beth Shean

No.	Location	Date of Excavation	Excavator	Features	Finds	Periods	References	No. on Map
1	Tell al-Husn (Tell Beth Shean)	1926	Fitzgerald	Houses. Mosque & enclosure wall	Pottery	Byz-Umayyad	Fitzgerald 1931	1
2	'Villa Quarter' between theatre & amphitheatre	Nov. 1982	Peleg	3 buildings	Coins pottery & glass	Byz-Umayyad	Peleg 1983, 13-14	9
3	W. of theatre	April-May 1983	Peleg	3 rooms	?	Byz-early Islamic	Peleg 1984, 11	
4	Modern town centre	Jan 1984	Onn	Wall and stone pavement	Pottery (inc. geometric painted)	C12th -13th	Onn 1984, 10	
5	Amphitheatre	1986-7	Foerster & Tsafrir	Houses	Pottery	Abbasid-Mamluk	Foerster & Tsafri 1988, 38	
6	Central monument	1988	Foerster & Tsafrir	Flour mill	?	Abbasid or later	Foerster & Tsafrir 1988, 38	2
7	Silvanus Street	1988-9	Foerster & Tsafrir	Street of shops & portico with mosaic inscription	Pottery, metalwork, coins, glass	Umayyad	Tsafrifr & Foerster 1990, 22: Tsafrir & Foerster 1991, 126-8: Khamis 2000	5
8	W. Bath house	1988	Mazor	Lime kiln	?	Early Muslim	Mazor 1990, 27	18
9	Palladius Street	1988	Mazor	Walls & water channels	?	Middle Muslim [i.e.medieval]	Mazor 1990, 27	
10	Theatre	1988	Mazor	Rooms with earth floors & tabuns	Pottery, lamps & coins	Abbasid-Mamluk	Mazor 1990,29	7
11	N. of Temple	Nov. 1988-April 1989	Foerster & Tsafrir	Houses or workshops	?	Abbasid & middle ages	Tsafrifr & Foerster 1991,122	2
12	Nymphaeum	Nov. 1988-April 1989	Foerster & Tsafrir	i) buildings in front of Nymphaeum ii) residential quarter [courtyard buildings]	?	i) Umayyad-Fatimid ii) Ayyubid-Mamluk	Tsafrifr & Foerster 122-4	
13	Valley Street	Nov. 1988-April 1989	Foerster & Tsafrir	'many buildings'	?	Muslim period [post Umayyad & Mamluk]	Tsafrifr & Foerster 124	

Table 2 continued – Baysan Escavations

14	S. of Temple	Nov. 1988-April 1989	Foerster & Tsafrir	i) industrial installations [dyeing] ii) mosque & other buildings	Pottery, coins	i) Byz-Umayyad ii) Abbasid	Tsafrifr & Foerster 126: Foerster & Tsafrir 1988, 32 & 43	17
15	Silvanus Street	1988-9	Foerster & Tsafrir	i) houses ii) flour mill	?	i) Abbasid ii) Mamluk	Tsafrifr & Foerster 128	
16	Theatre Square	1988 & 1989-91	Bar Nathan & Mazor	Pottery workshops	?	Umayyad	Bar Nathan & Mazor 1992, 36-7: Mazor 1990, 29-30	6
17	Palladius Street	1988	Foerster & Tsafrir	Industrial installation	?	Abbasid or later	Foerster & Tsafrir 1990, 19	
18	N.E. of Palladius Street	1989-91	Bar Nathan & Mazor	Mill	?	Umayyad	Mazor & Bar Nathan 1992, 36-7	
19	E. Bath house	1989-91	Bar Nathan & Mazor	Industrial building	?	Umayyad	Mazor & Bar Nathan 1992, 36-7	
20	Sigma	1989-91	Bar Nathan & Mazor	Cemetery [muslim]	?	Umayyad	Mazor & Bar Nathan 1992, 43-4	[illegible]
21	Crusader citadel	July-August 1992	Seligman	i)bath house with mosaics ii) citadel	Pottery & coins	i) L.Byz / Umayyad ii) Crusader-Mamluk	Seligman 1996	
22	N of Theatre	1992-4	Bar Nathan & Mazor Mazor & Bar Nathan 1998,17- 20 & Fig 16	Aqueduct	?	Umayyad	Mazor & Bar Nathan 1998, 7	
23	Next to W. bath house	1992-4	Bar Nathan & Mazor	2 mills & channel	?	Umayyad	Mazor & Bar Nathan 1998, 7	
24	Byz. Agora	1992-4	Bar Nathan & Mazor	Pottery workshops	?	Umayyad	Mazor & Bar Nathan 1998,17- 20 & Fig 16	
25	W. of Amphitheatre	Oct-Nov 1994	Avashalom-Gorni	Building with mosaic floors & paved courtyard	?	Umayyad-Abbasid	Avashalom Gorni 2000, 29*	
26	N. of Ottoman serai	Oct-Nov 1994	Avashalom-Gorni	Building with 4 rooms & rectangular structure with staircase	?	C8th -, Abbasid	Avashalom Gorni 2000, 29-30*	

Table 2 continued – Baysan Excavations

14	S. of Temple	Nov. 1988-April 1989	Foerster & Tsafrir	i) industrial installations [dyeing] ii) mosque & other buildings	Pottery, coins	i) Byz-Umayyad ii) Abbasid	Tsafrifr & Foerster 126: Foerster & Tsafrir 1988, 32 & 43
15	Silvanus Street	1988-9	Foerster & Tsafrir	i) houses ii) flour mill	?	i) Abbasid ii) Mamluk	Tsafrifr & Foerster 128
16	Theatre Square	1988 & 1989-91	Bar Nathan & Mazor	Pottery workshops	?	Umayyad	Bar Nathan & Mazor 1992, 36-7: Mazor 1990, 29-30
17	Palladius Street	1988	Foerster & Tsafrir	Industrial installation	?	Abbasid or later	Foerster & Tsafrir 1990, 19
18	N.E. of Palladius Street	1989-91	Bar Nathan & Mazor	Mill	?	Umayyad	Mazor & Bar Nathan 1992, 36-7
19	E. Bath house	1989-91	Bar Nathan & Mazor	Industrial building	?	Umayyad	Mazor & Bar Nathan 1992, 36-7
20	Sigma	1989-91	Bar Nathan & Mazor	Cemetery [muslim]	?	Umayyad	Mazor & Bar Nathan 1992, 43-4
21	Crusader citadel	July-August 1992	Seligman	i)bath house with mosaics ii) citadel	Pottery & coins	i) L.Byz / Umayyad ii) Crusader-Mamluk	Seligman 1996
22	N of Theatre	1992-4	Bar Nathan & Mazor Mazor & Bar Nathan 1998,17- 20 & Fig 16	Aqueduct	?	Umayyad	Mazor & Bar Nathan 1998, 7
23	Next to W. bath house	1992-4	Bar Nathan & Mazor	2 mills & channel	?	Umayyad	Mazor & Bar Nathan 1998, 7
24	Byz. Agora	1992-4	Bar Nathan & Mazor	Pottery workshops	?	Umayyad	Mazor & Bar Nathan 1998,17- 20 & Fig 16
25	W. of Amphitheatre	Oct-Nov 1994	Avashalom-Gorni	Building with mosaic floors & paved courtyard	?	Umayyad-Abbasid	Avashalom Gorni 2000, 29*
26	N. of Ottoman serai	Oct-Nov 1994	Avashalom-Gorni	Building with 4 rooms & rectangular structure with staircase	?	C8th -, Abbasid	Avashalom Gorni 2000, 29-30*

Table 2 continued – Baysan Excavations

27	N. of Ottoman serai B	Oct-Nov 1994	Avashalom Gorni	i) 2 room structure with mosaic floor ii) building with several rooms & polychrome geometric mosaic	Pottery & coins	i) early Islamic ii) Abbasid?	Avashalom Gorni 2000, 30*	12
28	Tell al0Husn (Tel Beth Shean)	1994-6	Mazar	Hall & city wall	?	Medieval [probably early Islamic]	Mazar 1998,46	1
29	Bet Shean 197725/21140	June-Oct 1998	Sion	4 luxurious dwellings	Pottery & coins	Byz-early Islamic, re-used until early C11th	Sion 2000	15

Table 3 - Tiberias Excavations

No.	Location	Date	Excavator	Features	Finds	Period	References	Map
1	Hammath Tiberias	1920-1	Slouschz	synagogue	Pottery & C10th tombstone	C4th-10th	Slouschz	5
2	Hammath Tiberias	1961	Dothan	Synagogue	Pottery	C2nd-8th	Dothan	7
3	Hammath Tiberias	1970	Oren	Large building with room for glazing ceramics	Glass cullets, pottery	Umayyad-Fatimid [C8th-11th]	Oren 1971	7
4	Tiberias (N. of south gate of Roman city)	1973-4	Foerster	7 large buildings	?	Late Byz.-early Islamic	Foerster 1977	
5	Tiberias (S. of Ottoman wall)	March April 1982	Dar & Adan Bayewitz	Paved area	Pottery & coins	C9th-10th	Dar & Adan Bayewitz 1983	
6	Centre of Tiberias	March 1989	Onn	Courtyard house with well	Pottery, gold coins and jewels	C10th-11th	Onn 1992	
7	Below Mount Berenice (250m from Lake Tiberias)	Oct-Nov 1989	Hirschfeld	House with cistern	Pottery and metalwork	C9th-11th	Hirschfeld 1991	
8	Below Mount Berenice (250m from Lake Tiberias)	Oct-Nov 1989	Hirschfeld	i) public building ii) houses with mosaics	?	i) C2nd-8th ii) C9th - 11th	Hirschfeld 1991	3

Table 3 continued – Tiberias Excavations

9	Ottoman town walls	April July 1991	Feig	i) foundations of tower L ii) foundations of tower M iii) foundations of tower N	pottery	i) early Islamic ii) Byz-early Islamic iii) post-Crusader	Feig 1992	
10	Gane Hammat Hotel	April July 1991	Feig	Building remains	pottery	C7th -8th	Feig 1992	
11	Mt. Berenice A	Oct 1990-April 1991	Hirschfeld	i) 1st church ii) 2nd church iii) house	pottery	i) C6th-8th ii) C8th -13th iii) C13th -14th	Hirschfeld 1992, 94-6	
12	Mt. Berenice D	Oct 1990-April 1991	Hirschfeld	Cistern	?	C8th-9th	Hirschfeld 1992, 97	
13	Mt. Berenice E	Oct 1990-April1991	Hirschfeld	Bath house	?	Early Islamic	Hirschfeld 1992, 97	1
14	Ganei Menora 2021/2412	pre-1993	Damati	Pottery kiln(s)	Pottery	C9th-10th	Damati 1993	8
15	Tiberias. Area F	July August 1993	Hirschfeld	i) basilica ii) road/street	Pottery	i) C4th -8th ii) C8th -10th	Hirschfeld 1997	2
16	Tiberias 201075-100/242440-470	Sept-Oct 1998	Hirschfeld & Gutfeld	Water tower, 2 storey courtyard house, metal workshop & paved street	Pottery, hoard of bronze vessels	Fatimid [C10th -11th]	Hirschfeld & Gutfeld 2000	2

Table 33 – Ramla Excavations

No	Location	Date	Excavator	Features	Finds	Periods	References	Licence No.
1	Police post 13775/14860	August 1940	Ory & Johns	round cistern	pottery	Abbasid or Fatimid	PAM 157 5.8.1940	
2	White Mosque 13745/14835	March-May 1949 & Feb, 1965	Kaplan	Minaret, walls, & cisterns	pottery	'early Islamic' to Crusader/Mamluk	Kaplan 1959	
3	Shikun Giora 1365/1490	1965	Rosen-Ayalon & Eitan	Pottery workshop	pottery	C8th [probably C9th - 10th]	Rosen-Ayalon & Eitan 1966 & 1969	A-60/1965
4	'Old City'	1965	Rosen-Ayalon & Eitan		pottery	C8th & C14th -15th	Rosen-Ayalon & Eitan 1969,4	A-60/1965
5	White Mosque 13742/14842	1965	Rosen-Ayalon & Eitan		pottery	C8th [probably C9th - 10th]	Rosen-Ayalon & Eitan 1969,4	A-60/1965
6	13750/14806	1965	Rosen-Ayalon & Eitan		pottery	C8th [probably C9th - 10th]	Rosen-Ayalon & Eitan 1969,4	A-60/1965
7	Stadium 13750/14806	1965	Rosen-Ayalon & Eitan		pottery	C8th [probably C9th - 10th]	Rosen-Ayalon & Eitan 1969,4	A-60/1965
8	500 metres from No.4	1966	Druks		pottery	C8th [probably C9th - 10th]	Rosen-Ayalon & Eitan 1969,4	A-118/1966
9	TKB Street 'Old City 137700/148100	1973	Rosen-Ayalon & Brosch	3 mosaics	pottery	C8th [probably C9th - 10th]	Rosen-Ayalon 1976	A-421/1973
10	White Mosque 13745/1484	Winter 1980	Ben-Dov	Wall foundations, [shop]units, vaulted tomb	Pottery	C8th-16th	Ben Dov 1984	A-499/1974
11	N. of White Mosque 3745/1484	1991	?	Dyeing installation	Pottery	Later medieval & C8th -9th	Rosen-Ayalon 1996 & Porath and Ilani 1993,11	
12	Bathhouse in 'Old City' 138050/148070	1991-2	?	Plan of bathhouse	pottery	Mamluk and Ottoman	Personal observation	
13	13725/14828	Oct-Nov 1992	Glick	Fortification wall, plaster floors	Pottery (inc mould) stone vessels, metal slag, white mosaic tesserae	C9th-8th	Glick 2000	A-1924/1992 A-1929/1992
14	13830-5/14875-8	1994	Boschino		pottery	Early Islamic	Boschino 2000	A-2213/1994
15	The Courthouse 137625/148370	March April 1992	Landau	Walls, drains, cisterns, refuse pits, robber trenches	pottery	C8th-12th & medieval & Ottoman	Landau 1998	A-1867/1992

16	13785/14840	Aug-Sept 1993	Segal	Courtyard, cess pits, pool with red plaster	Pottery, ivory figurine	Umayyad, Abbasid and Fatimid	Segal 1998	A-2039/1993
17	13786/14864	Feb-March 1994	Glick	Tabun walls, floors	Pottery, iron slag	C9th-10th	Glick 1999	A-2103/1994
18	138175/148595	Sept 1994-Jan 1995	Glick and Gamil	13 cisterns, silos, vaulted roofs, pools with red paint, oil press, mosaic with animals	Pottery, kufic inscription dated 912/3 AD and 922/3 AD	'Early Arab period'	Glick & Gamil 2000	A-2347/1995
19	N. of White Mosque 13750-80/14825-79	Aug-Sept 1996	Gutfeld	Drainage channel, large Umayyad building	Pottery, glass, bone and stone tools, metal objects & iron slag	Umayyad-Ottoman	Gutfeld 1999b, Booklet, 34-7	G-123/1996
20	138050-100/148659	Sept 1996	Gutfeld	Water pipes dwellings, cisterns	pottery	Early Islamic period	Gutfeld 1999a	G-133/1996
21	Ayalon Prison	Aug-Sept 1996	Sion	House, cess pit, pool with red plaster	Pottery, glass, metal weights	C8th-10th [NB two Mamluk coins also recovered]	Sion 2000, Booklet, 34-7	A-2520/1996
22	13875-80/ 14825-79	Dec 1996	Priel	Wall, cess pit	Pottery, glass	C8th-9th	Priel 1999	A-2582/1996
23	13785/14760	June 1997	Abd Rabu	Floor and cess pit	pottery	Umayyad and Abbasid	Abd Rabu 1999	
24	Visitors' Centre 138811/148973	June-July 1997	Haddad	Wall foundations	Pottery, marble frags	C8th-10th	Haddad 1999, Booklet 53	
25	Pinkas Street 1365/1473	Aug 1997	Elisha	Walls	Pottery	C8th-10th	Elisha 2000	
26	Little Holland 13825-71/ 14857-65	Aug-Spet 1997	Vitto	Pools with red dye, cistern	Pottery, glass and coins	Early Islamic & Mamluk	Vito 2000, Booklet 17-18	2722/1977
27	Ha-Palmah Compound 13850/14825	Shor	Shor	Walls, floors, cistern, pottery kiln	Pottery	C9th-11th	Shor 1999	
28	Central Bus Station. 13850/14825	Dec 1997-Feb 1998	Torgē	Cistern, Mamluk houses	Pottery, inc. kiln bars	Mamluk and Ottoman	Booklet 49-50	
29	Corner of Vilnai St and Ben Zvi St 13680/14880	Jan 1998	Gudovitch	Floors, walls, coarse mosaic, 2 pools	Pottery	C8th	Booklet 44	2799/1998
30	Betar St 138250/14830	1998-9?	Gudovitch	Floor, water channel	Pottery	C8th?	Booklet 45	3012/1998
31	Vilnai St 13683/14895	1998-9?	Gudovitch	Cistern, walls	Pottery	C8th	Booklet 44-5	2887/1998

31	Vilnai St 13683/14895	1998-9?	Gudovitch					

32	13725-35/ 14895-905	March 1998	Ayash	floor	Pottery	$C8^{th}$-9^{th}	Ayash 2000	
33	Hagdud Haviri St 138100/14850	May 1998	Avissar and Barbé	walls, deep Crusader period cut.	Pottery	$C8^{th}$-9^{th}	Booklet 48	2917/1998
34	Yehezekel Street 13725/14760	July-August 1998	Zelinger	Installation for processing leather[textiles]	Pottery	$C8^{th}$-10th	Zelinger 2000, Booklet 43	
35	1367/1480	July-August 1998	Kletter	Tabun, rooms, architecture	Pottery (inc. slag) 5 broken Arabic tombstone frags (late $C9^{th}$ -11^{th})	$C9^{th}$-10^{th}	Kletter 2000, Booklet 46-7	2867/1998
36	13815-37/ 14910-27	Aug-Sept 1998	Avissar	Kiln, installation	Pottery (inc. slag), broken Muslim & Christian tombstone frags.	$C8^{th}$ -9^{th}	Avissar 2000, Booklet 8-9	
37	13857/14838	Sept. 1998	Haddad	Cistern	Pottery	Early Islamic	Haddad 2000	
38	Little Holland 13820-13825/1485-60	Sept-Oct 1998	Sklar	Abbasid buildings, Mamluk tabun, Ottoman cess pit.	pottery	Abbasid-Mamluk	Booklet 51-2	2944/1998
39	Na'an East 13789-92/ 14371-4	Oct 1998	Zelinger	Aqueduct	Pottery and coin	Abbasid	Booklet p.43, Zelinger 2000	
40	Road 40 13830/1475	Pre-1999	Paz and Messika	9 circular installations, walls & floors	Pottery and coins	Abbasid-Fatimid	Booklet p.33	

APPENDIX 2

STATISTICS FROM THE OTTOMAN PERIOD

Because of the wealth of information available for the sixteenth century it was necessary to construct a number of tables to investigate particular trends and hypotheses. A total of twelve tables were made using data derived ultimately from Ottoman archival sources and translated in a number of recent works (Heyd 1960; Hütteroth and Abdulfattah 1977; Cohen and Lewis 1978; Bakhit 1982 and Singer 1994).

Two main problems were encountered when making the tables, the first was where data was missing and the second concerned the calculation of populations. Where data was missing, as for example the revenue figures for Jerusalem in 1592, the nearest complete set of data was used. In order to calculate populations I have deviated slightly from the method usually adopted (see for example Hütteroth and Abdulfattah 1977, 42-3). Normally the number of households is multiplied by five and the total number of *mujarrad* (bachelors) and religious persons is added to this to give a total population. In my calculations I have not added the *mujarrad* or religious personnel because it appears that neither were consistently recorded in the register. The religious personnel such as *imams* and *khatibs* were often left out of the registers because they were exempt from taxation whilst the *mujarrad* are completely missing for the *Liwa* of Lajjun. As a consequence of the method I have adopted the real population is likely to have been higher than given in the tables and will differ slightly from the calculations given elsewhere.

The tables can be divided into three groups; those dealing with population (1-2), those dealing with religious composition (3-8) and the third dealing with matters of revenue (9-12).

1) This table gives the basic population data on which most of the other tables are based and indicates what information is available for each year. At the end of the table average populations for each city are presented and these are ranked in descending order.
2) This gives the population for the middle of the sixteenth century (AD1546/7) based on the nearest available year. The totals differ slightly from the averages in Table 1 and place Safed much lower down the list.
3) This table gives an idea of the religious composition of the six main towns of Palestine during the sixteenth century based on the number of households. Only Gaza and Nablus have the full range of religious groups represented including Muslims, Christians, Jews and Samaritans. It is notable that only one town at one date (Hebron in 1525/6) has only Muslims present and this is when the total population is lower than 1000.
4) This table shows the religious composition as a percentage of the population for each town. It can be seen that the percentage of Muslims never dips below 50% and is generally about 80% of the population.
5) This table shows the proportion of villages with mixed religious populations. This may be contrasted with the towns which have 100% mixed populations whereas 96% of villages have Muslim only populations.
6) This table compares percentage of households of different religions in urban and rural situations. In each case the town is compared with the district in which it is located. In general the towns demonstrate a much greater mix of different religions. Also there is some correlation between the religions represented in the towns and those found in each district. It is however notable that Samaritans are not found outside the towns of Gaza and Nablus. (The notes explain the composition of the villages).
7) This table shows the number of imams recorded for the six main towns of Palestine. In some cases (Gaza in 1525/6 and 1562/3 and Jerusalem in 1562) a general figure for Muslim religious persons has been given which includes *imams*, *khatibs* and *muezzins*, in these cases the total has been divided by three to provide some indication of the number. In other cases ((Hebron in 1525/6 and 1562, Jerusalem in 1596/7 and Nablus in 1596/7) no imams are recorded which should not be taken to mean that none were present simply that they were not recorded because they owed no tax.
8) This table is similar to Table 7 and presents the number of imams recoded for the four cities of southern Syria.
9) This table compares population with revenue for the towns and villages of Palestine ranked in order of population size.
10) This table is the same as Table 9 except that the settlements are ranked in order of revenue
11) This table compare the urban revenue with that of the immediate rural hinterland. On average the urban revenue makes up approximately 20% of the total for the district except in the case of Safed where it forms nearly 60% of the revenue for the area.
12) The table compares the revenue per person in the towns and villages. Although there is no obvious pattern the table does indicate that there was no great difference between urban and rural revenues.

TABLE 1.

Population of cities in Palestine and Syria in the sixteenth century based on available tax registers.

	1523	1525/6	1530	1538	1543	1548/9	1553/4	1555/6	1556/7	1562/3	1567/8	1569	1596/7	Average
Damascus					41,390	46,695						43,105		43,730
Jerusalem		4,670		7,640			13,070			12,555			7,430	9,073
Ba'albakk	7,415		8,970		8,100									8,162
Gaza		4,455		8,430		11,120			11,015				5,365	8,077
Safed		4,630						1,425			9,655			5,237
Beirut	3,440		4,600		4,660									4,233
Hebron		665		3,880			4,885			4,970			3,490	3,578
Nablus				5,495		585							4,245	3,442
Sidon	1,110		4,540		3,330									2,993
Ramla		1,680		2,805		3,050			2,910				1,415	2,372

TABLE 2

Urban populations of Syria and Palestine in mid-sixteenth century[1]

	Total population[2]
Damascus	41,390[a]
Gaza	11,120[c]
Ba'albakk	8,100[a]
Jerusalem	7640[b]
Nablus	5495[b]
Beirut	4,660[a]
Hebron	3880[d]
Sidon	3,330[a]
Ramla	3050[c]
Safed	1425[e]

a= 1543, b= 1538, c= 1548, d=1538, e=1555

1. There is no year in which the information for all towns is complete. A best fit was achieved by selecting registers which were closest together, giving a mean date of AD 1546/7.

2. Estimate based on number of households multiplied by notional average of 5 persons per family

TABLE 3.

Number of households in towns of Palestine during Sixteenth century arranged according to religious affiliation.

Name of City	Religion	1525/6	1538/9	1553/4	1562/3	1596/7
Ramla	Muslims	310	528	528[a]	507[c]	201
	Christians	26	33	82[a]	75[c]	82
	Jews	0	0	0[a]	0[c]	0
	Samaritans	0	0	0[a]	0[c]	0
Gaza	Muslims	548	1331	1769[a]	1764[c]	697
	Christians	223	242	322[a]	340[c]	295
	Jews	95	98	115[a]	81[c]	73
	Samaritans	25	15	18[a]	18[c]	8
Hebron	Muslims	133	749	969	983	687
	Christians	0	20	8	11	11
	Jews	0	7	0	0	0
	Samaritans	0	0	0	0	0
Jerusalem	Muslims	616	1168	1987	1993	1444
	Christians	119	136	303	281	42
	Jews	199	224	324	237	0
	Samaritans	0	0	0	0	0
Safed	Muslims	693	------------	222[b]	986[d]	----------
	Christians	0	------------	0[b]	0[d]	----------
	Jews	233	------------	63[b]	945[d]	----------
	Samaritans	0	------------	0[b]	0[d]	----------
Nablus	Muslims	----------	984	109[a]	------------	796
	Christians	----------	15	2[a]	------------	18
	Jews	----------	71	5[a]	------------	15
	Samaritans	----------	29	1[a]	------------	20

KEY

a = 1548/9, b = 1555/6, c = 1556/7, d = 1567/8.

TABLE 4.

Percentage of different religious groups in towns of sixteenth century Palestine.

Name of City	Religion	1525/6	1538/9	1553/4	1562/3	1596/7
Ramla	Muslims	92.26%	94.12%	86.55%[a]	87.11%[c]	71.02%
	Christians	7.74%	5.88%	13.45%[a]	12.89%[c]	28.98%
	Jews	0%	0%	0%[a]	0%[c]	0%
	Samaritans	0%	0%	0%[a]	0%[c]	0%
Gaza	Muslims	61.5%	78.94%	79.54%[a]	80.07%[c]	64.95%
	Christians	25.02%	14.35%	14.48%[a]	15.43%[c]	27.49%
	Jews	10.66%	5.81%	5.17%[a]	3.67%[c]	6.80%
	Samaritans	2.80%	0.88%	0.80%[a]	00.81%[c]	0.758%
Hebron	Muslims	100%	98.52%	99.18%	98.89%	98.42%
	Christians	0%	2.57%	0.82%	1.11%	1.58%
	Jews	0%	0.90%	0%	0%	0%
	Samaritans	0%	0%	0%	0%	0%
Jerusalem	Muslims	65.92%	76.43%	76.00%	79.37%	97.17%
	Christians	12.74%	8.90%	11.59%	11.19%	2.83%
	Jews	21.30%	14.65%	12.39%	9.44%	0%
	Samaritans	0%	0%	0%	0%	0%
Safed	Muslims	74.83%	------------	77.89%[b]	51.06%[d]	----------
	Christians	0%	------------	0%[b]	0%[d]	----------
	Jews	25.17%	------------	22.11%[b]	48.49%[d]	----------
	Samaritans	0%	------------	0%[b]	0%[d]	----------
Nablus	Muslims	----------	89.54%	93.16%[a]	------------	93.76%
	Christians	----------	1.36%	1.70%[a]	------------	2.12%
	Jews	----------	6.46%	4.27%[a]	------------	1.76%
	Samaritans	----------	2.61%	0.87%[a]	------------	2.36%

KEY

a = 1548/9, b = 1555/6, c = 1556/7, d = 1567/8.

TABLE 5.

Religious Composition of villages.

	Religion	**Villages** (% in each district)
RAMLA	Muslim only	95.66
	Mixed	4.34
	Christians & Muslims	4.34
	Jews & Muslims	0
GAZA	Muslim only	98.44
	Mixed	1.56
	Christians & Muslims	1.56
	Jews & Muslims	0
HEBRON	Muslim only	100
	Mixed	0
	Christians & Muslims	0
	Jews & Muslims	0
JERUSALEM	Muslim only	92.16
	Mixed	7.84
	Christians & Muslims	7.84
	Jews & Muslims	0
SAFED	Muslim only	93.34
	Mixed	6.66
	Christians & Muslims	2.42
	Jews & Muslims	4.24
NABLUS	Muslim only	98.12
	Mixed	1.88
	Christians & Muslims	1.88
	Jews & Muslims	0

TABLE 6.

Comparison of urban and rural settlements in AD 1596 according to percentage of households of different religions.*

	Religion	Town	District
RAMLA[1]	Muslims	71.02	90.1
	Christians	28.98	9.9
	Jews	0	0
	Samaritans	0	0
GAZA[2]	Muslims	64.95	96.48
	Christians	27.49	3.52
	Jews	6.80	0
	Samaritans	0.75	0
HEBRON[3]	Muslims	98.42	100
	Christians	1.58	0
	Jews	0	0
	Samaritans	0	0
JERUSALEM[4]	Muslims	97.17	84.1
	Christians	2.83	15.9
	Jews	0	0
	Samaritans	0	0
SAFED[5]	Muslims	51.06	95.05
	Christians	0	0.55
	Jews	48.94	4.4
	Samaritans	0	0
NABLUS[6]	Muslims	93.76	97.85
	Christians	2.12	2.15
	Jews	1.76	0
	Samaritans	2.36	0

*Information from Ottoman tax registers (villages from Hütteroth & Abdulfattah 1977, 112-220; towns Cohen & Lewis 1978, 81-169).

Notes to Table 6

1) Ramla district (*nahiya*)
69 villages 3 of which have Christian populations. The largest village in the nahiya is Ludd (Lydda) with a large Christian minority (233 Christian and 241 Muslim families). 'Abud has a Christian majority (19 Christian and 16 Muslim families) whilst Kharabta has a small Christian minority (29 Muslim and 4 Christian families). i.e. 4.16% of villages have Christian populations

2) Gaza district (*nahiya*)
128 villages of which only two have Christian populations. Dayr Darum has large Christian minority (125 Christian and 175 Muslim families) whilst Sawafir al-Halil has Christian majority (91 Christian and 71 Muslim families).

3) Hebron district (*nahiya*)
29 villages with no Christian or Jewish populations recorded.

4) Jerusalem al-Quds district (*nahiya*)
Total 148 villages.136 villages with only Muslim population.12 villages with Christian population 4 of which had predominantly Christians. 8.1% of villages had a Christian population

5) Safed district (*liwa*) excluding *nahiyas* of Tibnin and Şaqif.
Nahiya Jira 55 villages of which two have Jewish populations. 'Ayn Zaytoun has a large minority of Jews (45 Jewish and 59 Muslim families) whilst a third of the population of Bira was Jewish (38 Muslim and 16 Jewish families).
Nahiya Tabariyya 54 villages of which three have mixed populations either Muslim and Christian or Muslim and Jewish. Kafr Kanna had a sizeable Jewish minority (95 Jewish households and 426 Muslim households). Two villages had a small Christian minority (Rayna had 9 Christian and 139 Muslim families and Nasira had 17 Christian and 254 Muslim families).
Nahiya 'Akka 56 villages of which 7 have mixed populations. 4 of these villages had Jewish populations two (Julis and Buqaya) as a majority and two (Kafr Yasif and Kabul) as a minority. 3 of the villages (al-Bina, Kafr Dinkin and Iklil) had small Christian populations.
Total 165 villages of which 11 (i.e. 6.6%). are mixed, either Muslim and Christian (4 i.e. 2.42%) or Muslim and Jewish (7 i.e. 4.24%).

6) Nablus district (*liwa*).
Divided into four *nahiyas*:
Nahiya Jabal Şami 69 villages of which only one (Jubayl) has Christian population which forms a majority in the village (36 Christian families and 30 Muslim families)
Nahiya Jabal Qubal 100 villages only two of which have Christian population. Rafidiyya has a large Christian majority (85 Muslim households and 9 Muslim households) whilst the village of 'Askar has Christian minority (8 Christian and 21 Muslim families).
Nahiya Qaqun 12 villages one of which (Zayta) has a small Christian minority (91 Muslim families and 7 Christian families).
Nahiya Bani Sa'ab 32 villages with no Christians or Jews.
Total 213 Villages of which 4 of Christian populations i.e. 1.87 % of villages in this *liwa* have mixed populations.

TABLE 7.

Name of City	1525/6	1538/9	1553/4	1562/3	1596/7
Ramla	8	14	3^{a}	7^{c}	4
Gaza	10_{1}	24	15^{a}	20^{c}_{2}	13_{4}
Hebron	0	20	1	0	1
Jerusalem	1	26	10	30_{3}	0
Safed	20	--------------	16^{b}	9^{d}	---------
Nablus	--------------	18	6^{a}	--------------	0

KEY

a = 1548/9, b = 1555/6, c = 1556/7, d = 1567/8,
1= (29÷3), 2 = (59 ÷3), 3= (88 ÷ 3), 4 = (38+3).

Numbers of imams in towns of Palestine during the sixteenth century (after Hütteroth and Abdulfattah 1977, 81-160).

TABLE 8

Towns in the Province of Damascus during the sixteenth century: Number of Imams

	1523_{1}	1530_{2}	1543_{3}	1548_{4}	1569_{5}
Damascus	-------------	-------------	70	136	80
Ba'albak	11	27	13	-------------	-------------
Beirut	16	17	3	-------------	-------------
Sidon	0	4	3	-------------	-------------

1=*Tapu Defteri* No.430, 2= *Tapu Defteri* No.383, 3= *Tapu Defteri* No.1543,
4= *Tapu Defteri* No.263, 5= *Tapu Defteri* No.474.

81-

TABLE 9

Revenue of towns and large villages in AD1596[1]

Ranked in order of population size

Position	Name	Type of settlement	Population	Revenue
1.	Jerusalem	town	11,015	278,062
2.	Safed	town	9655	504,450
3.	Gaza	town	5365	497,838
4.	Nablus	town	4245	160,720
5.	Hebron	town	3490	55.814
6.	Majdal	village	2795	69,500
7.	Kafr Kanna	village	2605	56,303
8.	Lydda	village	2490	45,000
9.	Saffuriyya	village	1830	31,244
10.	Jabalya	village	1550	37,640
11.	Dayr Darum	village	1500	17,300
12.	'Alma	village	1440	51,100
13.	Bethlehem	village	1435	36,000
14	Ramla	town	1,415	96,790
15.	Nazareth	village	1405	14,800
16.	Bayt Jala	village	1225	30,000
17.	Buryar	village	1050	32,000

Notes
1. Jerusalem data is from 1562/3 as the data for 1596/7 is incomplete

TABLE 10

Revenue of towns and large villages in AD1596[1]
Ranked in order of revenue

Position	Name	Type of settlement	Population	Revenue
1.	Safed	town	9655	504,450
2.	Gaza	town	5365	497,838
3.	Jerusalem	town	11,015	278,062
4.	Nablus	town	4245	160,720
5.	Ramla	town	1,415	96,790
6.	Majdal	village	2795	69,500
7.	Kafr Kanna	village	2605	56,303
8.	Hebron	town	3490	55,814
9.	'Alma	village	1440	51,100
10.	Lydda	village	2490	45,000
11.	Jabalya	village	1550	37,640
12.	Bethlehem	village	1435	36,000
13.	Buryar	village	1050	32,000
14	Saffuriyya	village	1830	31,244
15.	Bayt Jala	village	1225	30,000
16.	Dayr Darum	village	1500	17,300
17.	Nazareth	village	1405	14,800

Notes
1. Jerusalem data is from 1562/3 as the data for 1596/7 is incomplete

TABLE 11

Revenue of towns and villages in AD1596[1]
Comparison of urban revenue with rural hinterland

Name of town	Urban revenue	Name of nahiya	Rural revenue	Number of villages	Average revenue per village	Total revenue for nahiya including urban revenue	Urban revenue as percentage of total revenue for nahiya
Safed	504,450	Nahiya Jira	345,031	52	6635.2115	849481	59.38%
Ramla	96,790	Nahiya Ramla	472,584	72	6563.667	569374	16%
Nablus	160,720	Nahiya Jabal Qubal	610,022	104	8243.5405	770742	20.85%
Jerusalem	278,062	Nahiya Quds	1,072,890	153	7012.3529	1350952	20.58%
Hebron	55,814	Nahiya Khalil	213734	30	7124.4667	269548	20.70%
Gaza	497,838	Nahiya Gaza	1194349	136	8781.9779	1692187	29.41

Notes
1. Jerusalem data is from 1562/3 as the data for 1596/7 is incomplete

TABLE 12

Revenue of towns and villages in AD1596[1]

Average revenue per person

	Town	Villages
Ramla	68.402	41.13
Jerusalem	22.147	41.13
Hebron	15.5992	35.32
Nablus	37.86	41.44
Safed	52.247	29.30
Gaza	92.79	39.01

Notes
1. Jerusalem data is from 1562/3 as the data for 1596/7 is incomplete

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Abbreviations

AJA - American Journal of Archaeology
BGA - Bibliotheca Geographorum Arabicorum
BASOR - Bulletin of the American Schools of Oriental Research
BAIAS - Bulletin of the Anglo-Israel Archaeological Society
BSOAS - Bulletin of the School of Oriental and African Studies
Cart. des Hosp. - Cartlaire générale de l'ordre des hospitaliers de Saint-Jean de Jérusalem (1100-1310), ed. J. Delaville leRoulx, 4 vols. Paris (1894-1906)
EAEHL - Encyclopaedia of Archaeological Excavations in the Holy Land.
EI - Erez Israel
EI 2 - Encyclopaedia of Islam, second edition Leiden 1950-2002
Encyclopaedia Judaica (Keter Publishing House Ltd., Jerusalem, 16 Vols., Jerusalem, 16 Vols., 1971-2).
ESI - Excavations and Surveys in Israel (English Version of *Hadashot Arkheologiot*)
HA - Hadashot Arkheologiot
IEJ - Israel Exploration Journal
JARCE - Journal of the American Research Centre in Egypt
JRAS - Journal of the Royal Asiatic Society
JNES - Journal of Near Eastern Studies
JMA - Jourrnal of Mediterranean Archaeology
NEAEHL - New Encyclopaedia of Archaeological Excavations in the Holy Land. Ed. Stern Jerusalem 1993
PEFQ - Palestine Exploration Fund Quarterly Statement
PJPES - Proceedings of the Jewish Palestine Exploration Society
QDAP - Quarterly of the Department of Antiquities of Palestine
RCEA - Combe, E. et al (eds.) 1931 ff., *Répertoire chronologique d'épigrphie arabe,* Cairo
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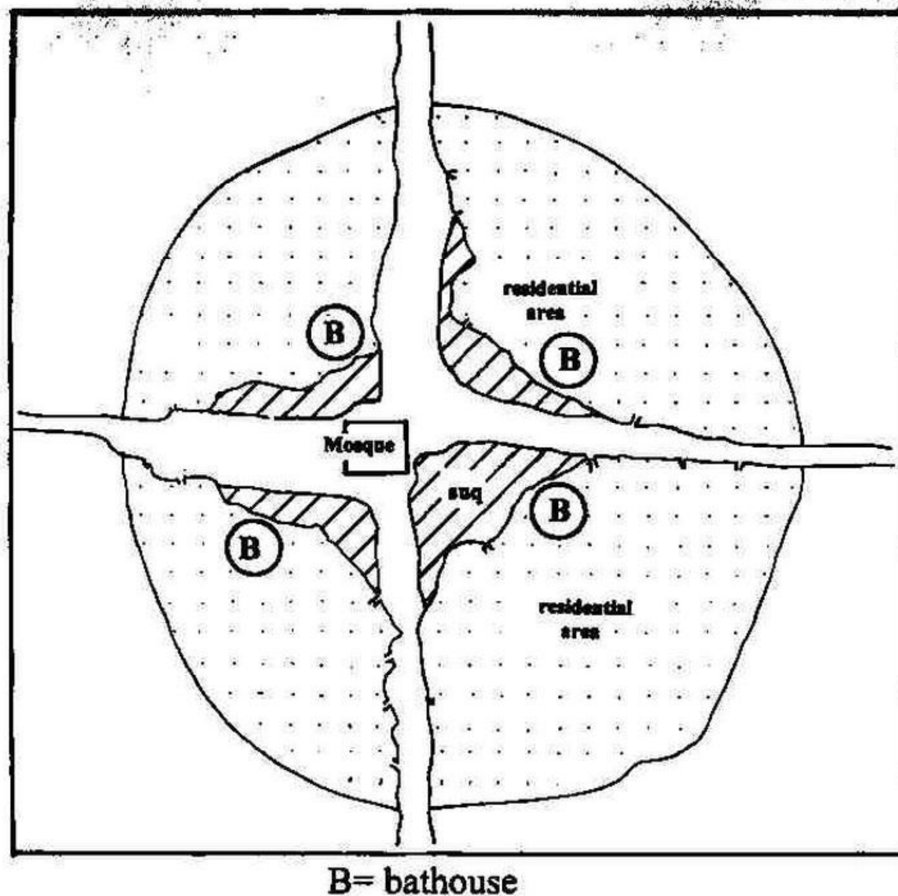


Figure 1. The stereotypical Muslim city of North Africa, based on work by W. Marcais (1928), G. Marcais (1945), R. LeTourneau 1957) and J. Berque (1958) (after Alsayyad 1991, 16, Fig 2.1).

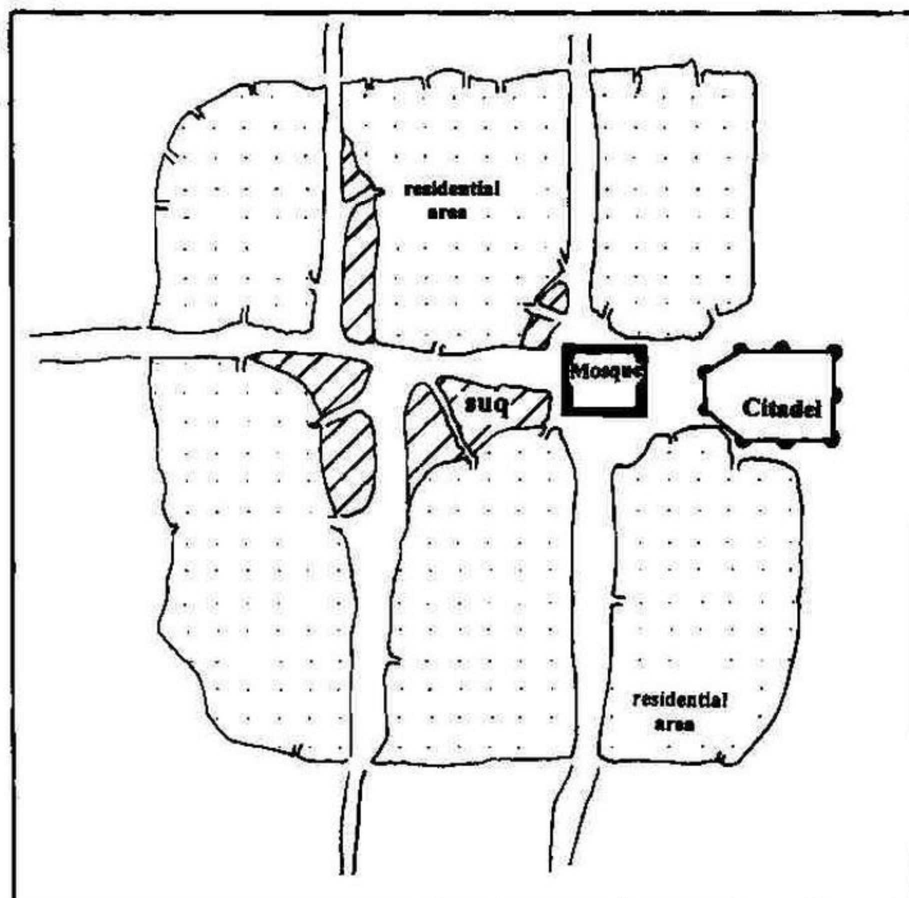


Figure 2. The stereotypical Muslim city of the Middle East, based on Sauvaget's text (1934-41) (after Alsayyad 1991, 19, Fig 2.2).

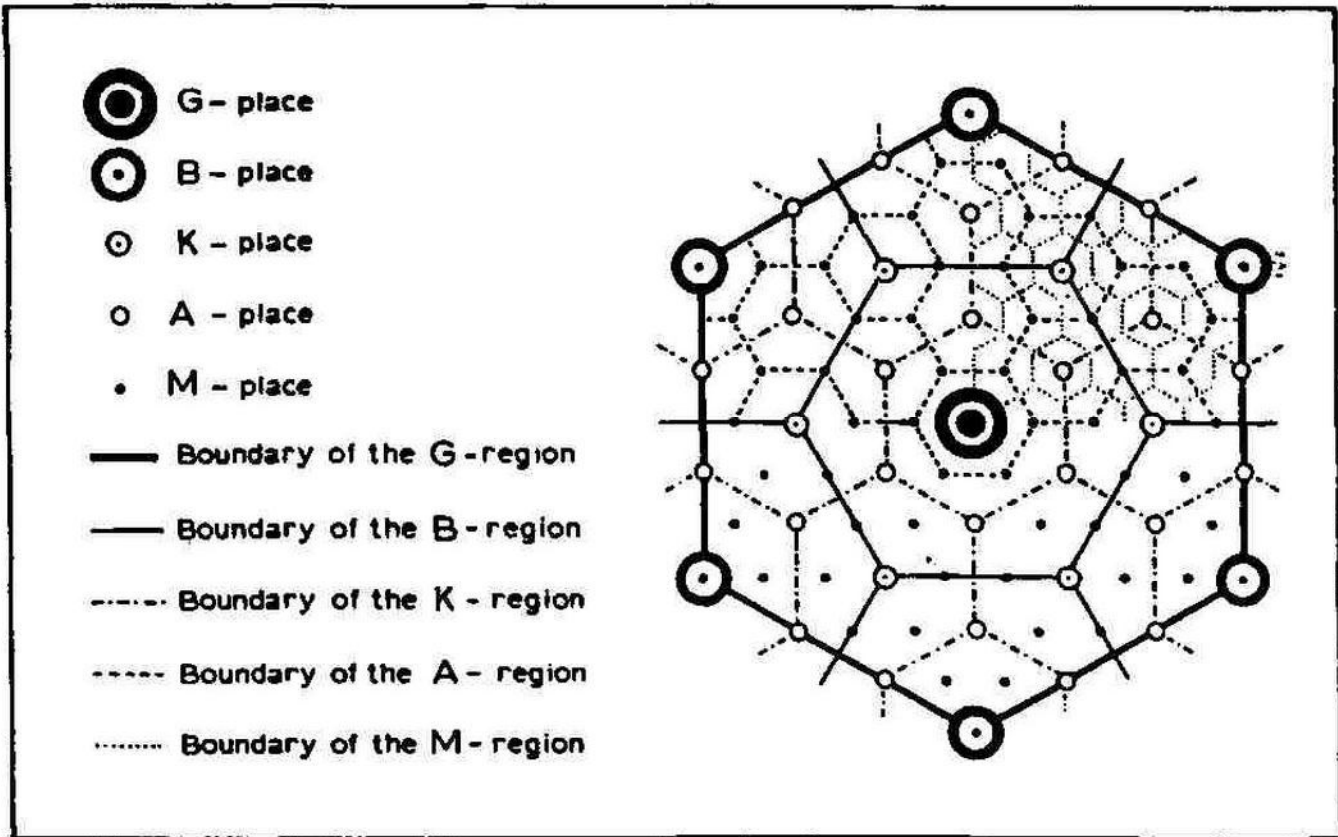


Figure 3. Idealised Central Place System after Christaller.

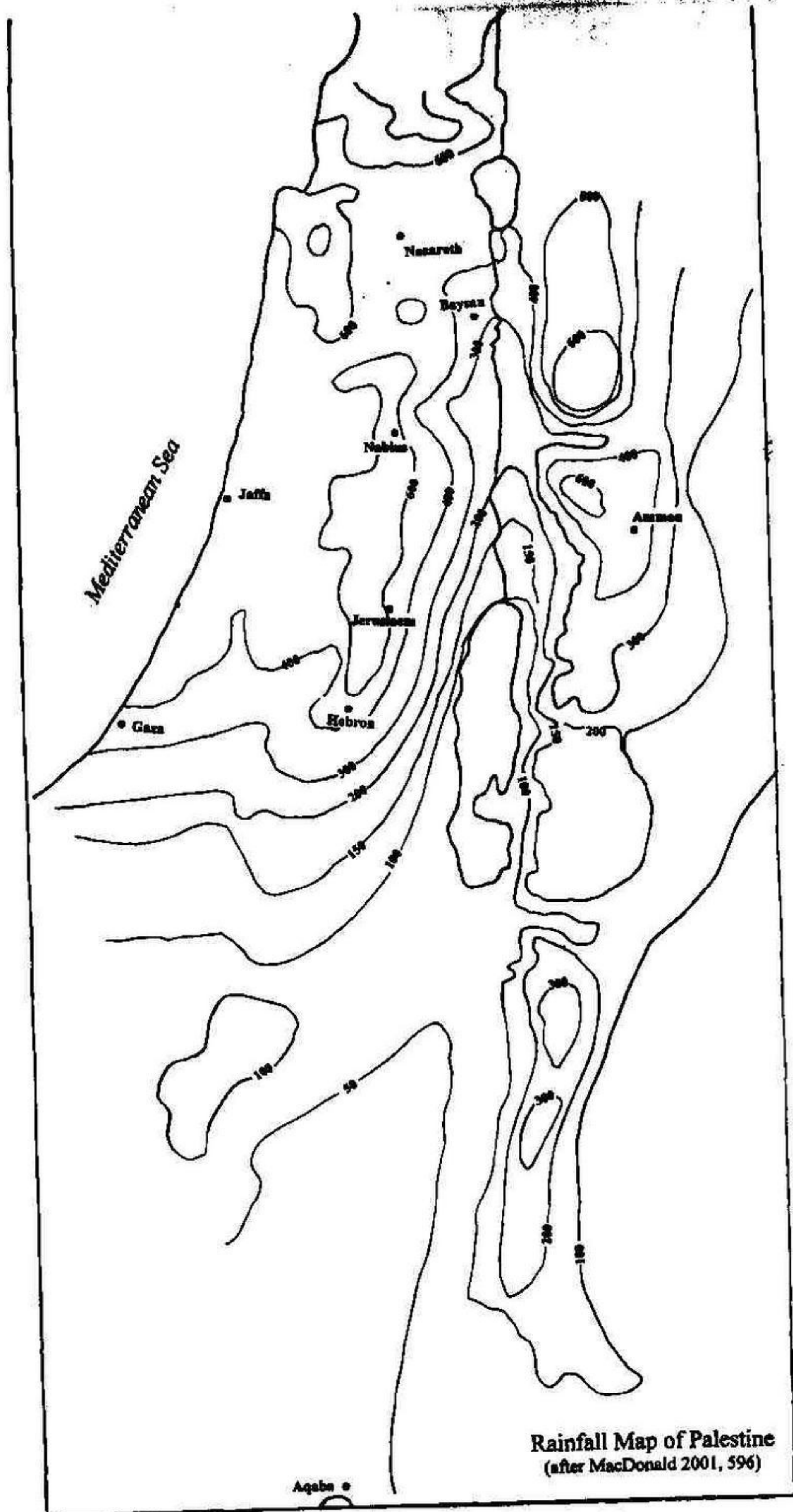


Figure 4. Rainfall map of Palestine (after MacDonald 2001, 596).

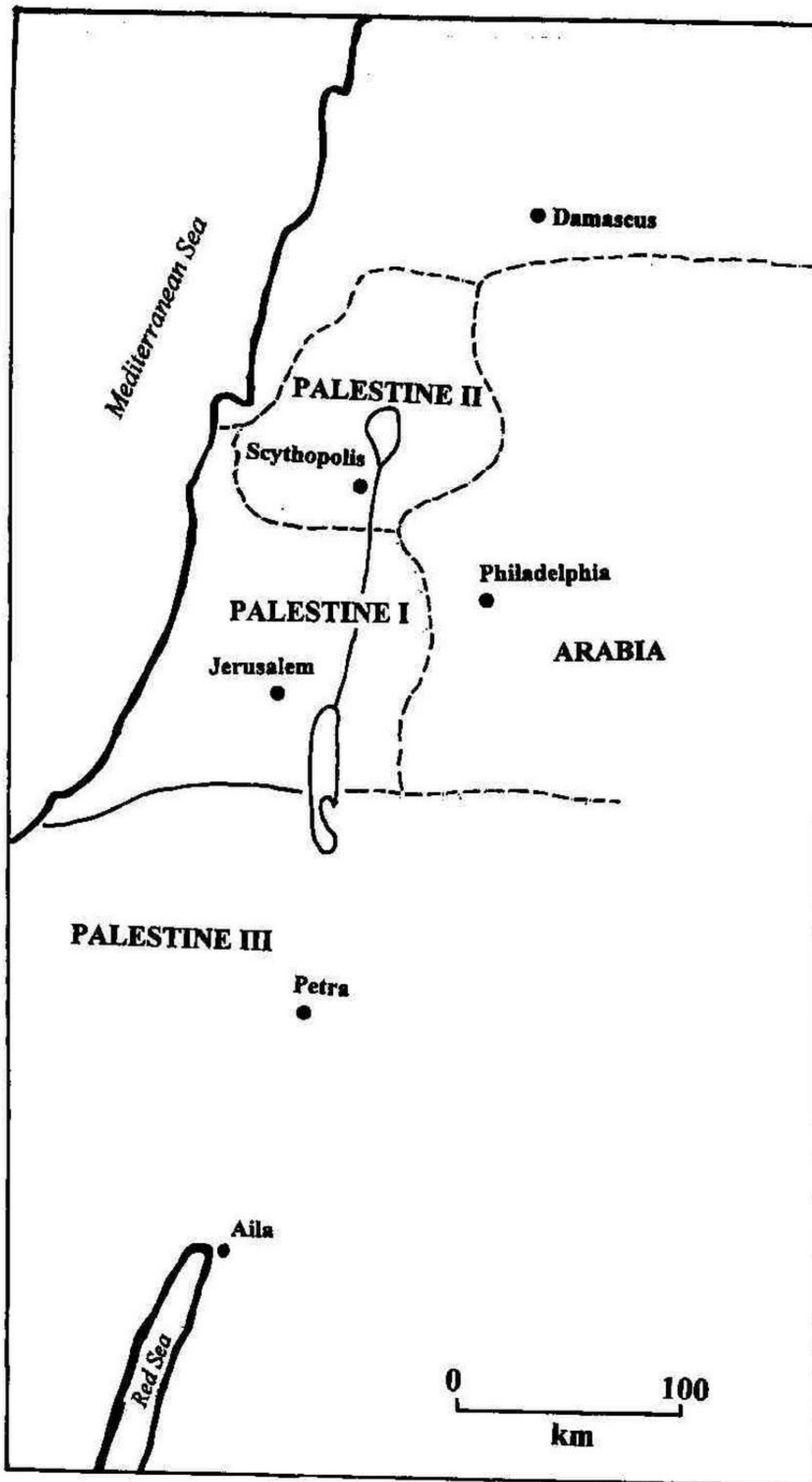


Figure 5. Palestine during the Byzantine period, administrative divisions (after Watson 2001, 464).

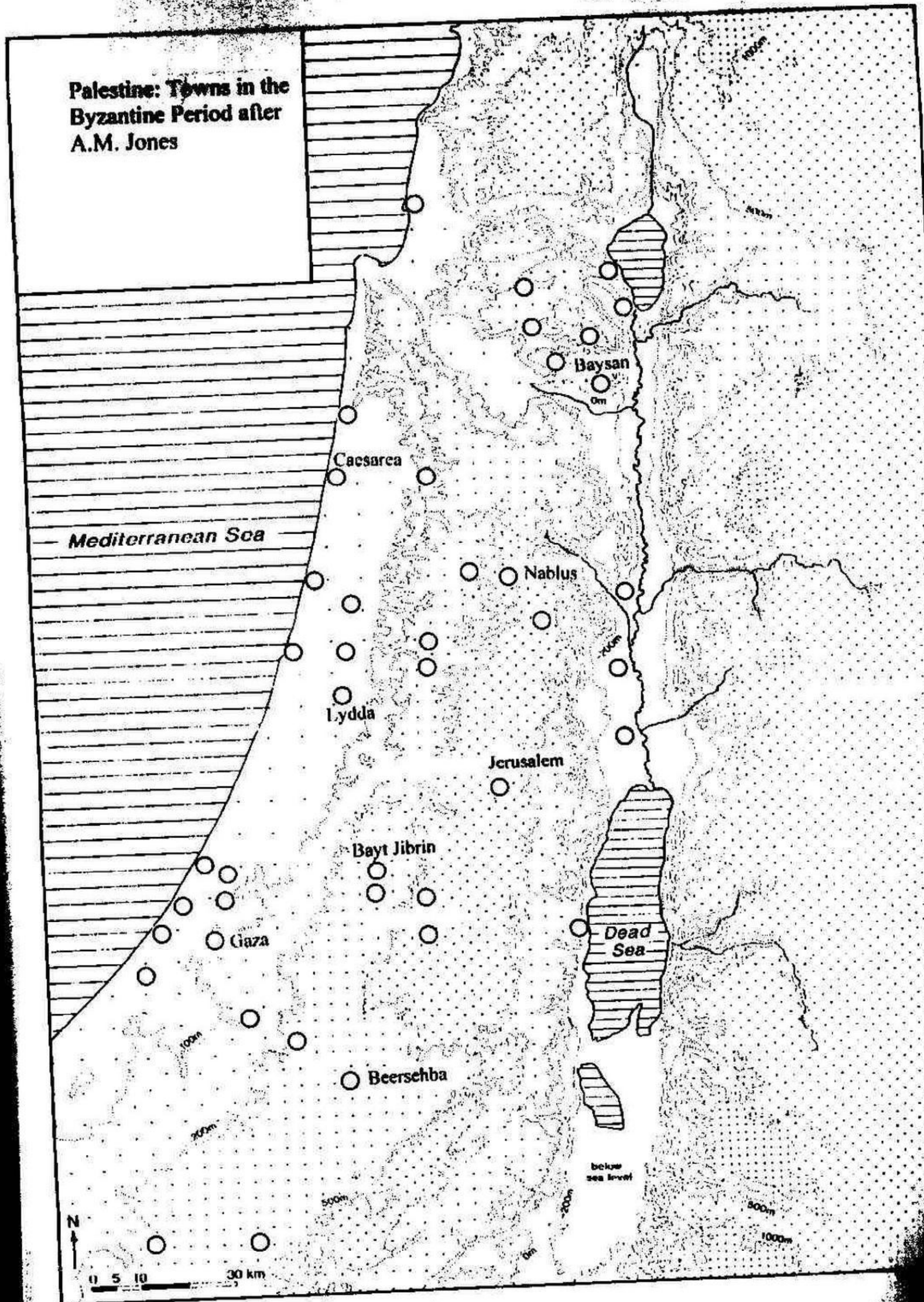


Figure 6. Palestine: towns in the Byzantine period after A.M. Jones.

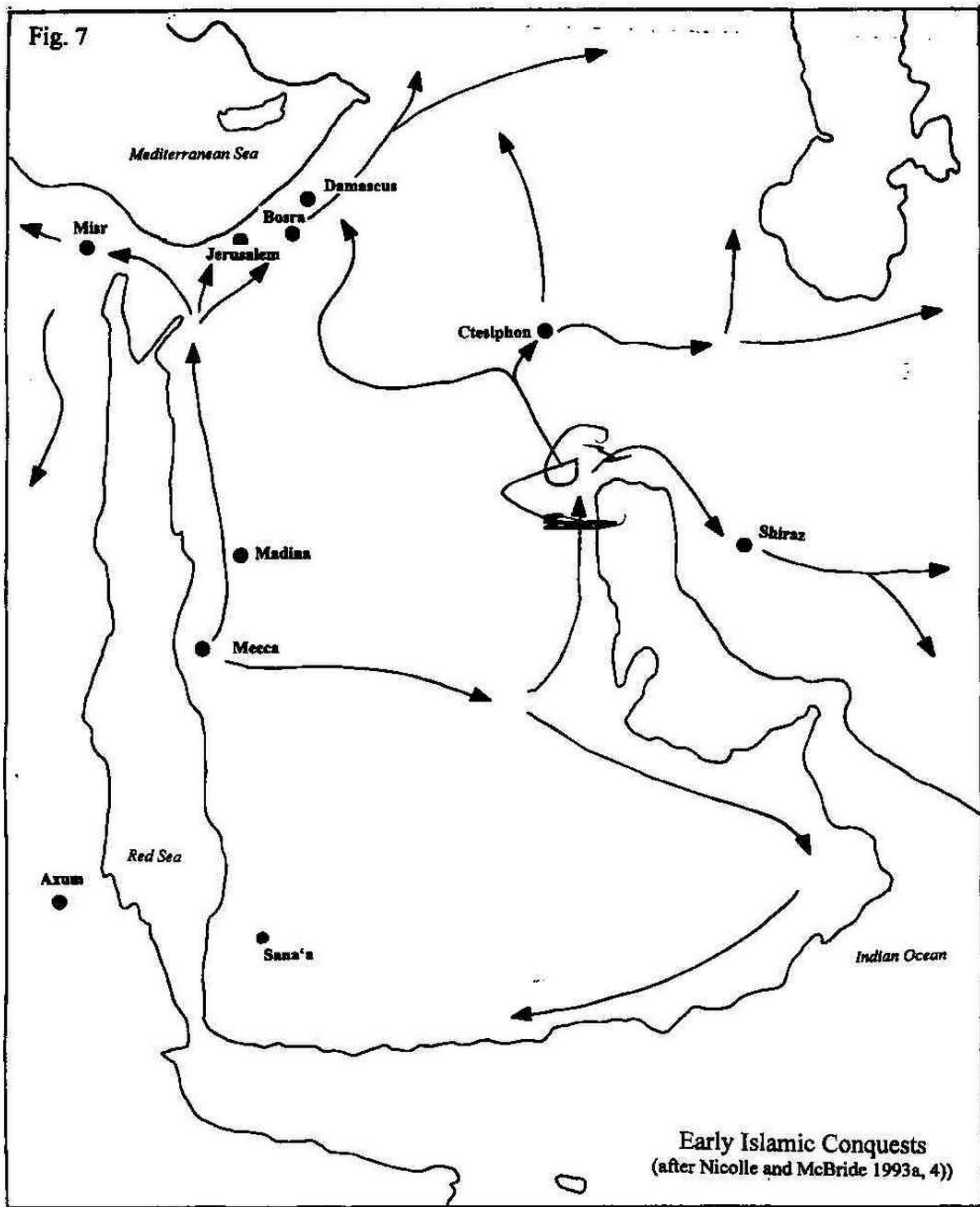


Figure 7. Early Muslim conquests after Nicolle and McBride (1993a, 4).

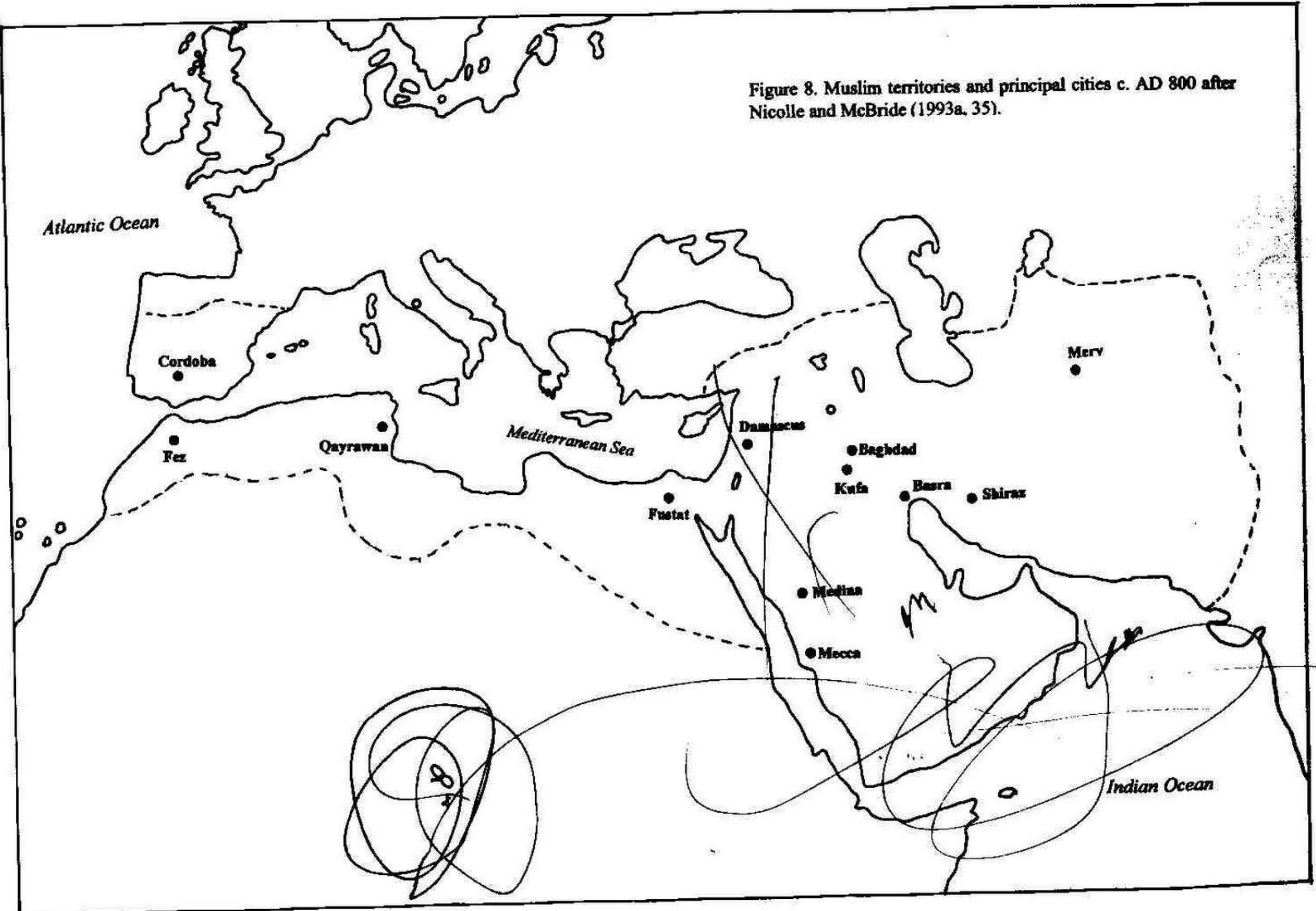


Figure 8. Muslim territories and principal cities c. AD 800 after Nicolle and McBride (1993a, 35).

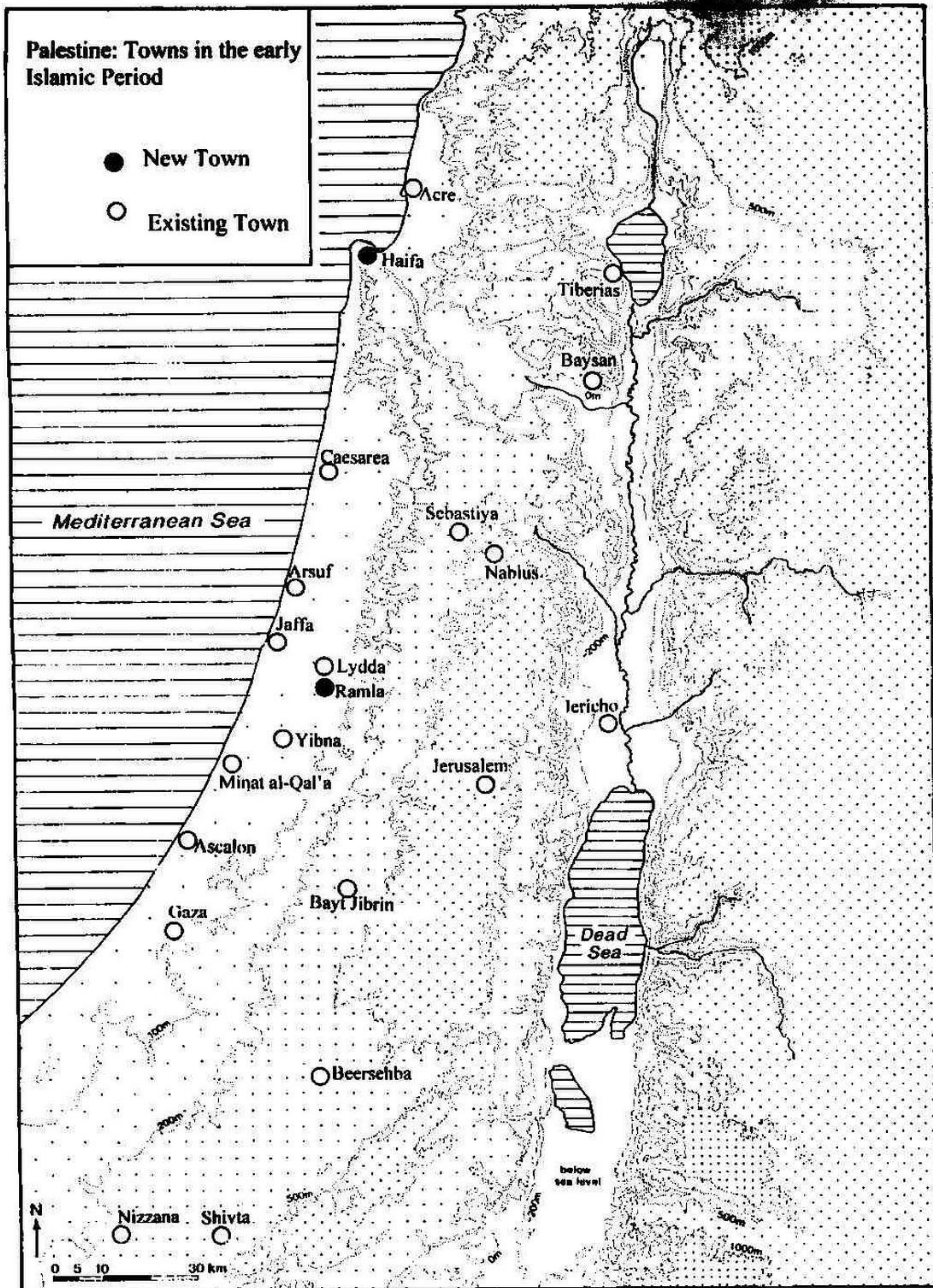


Figure 9. Palestine: towns in the early Islamic period.

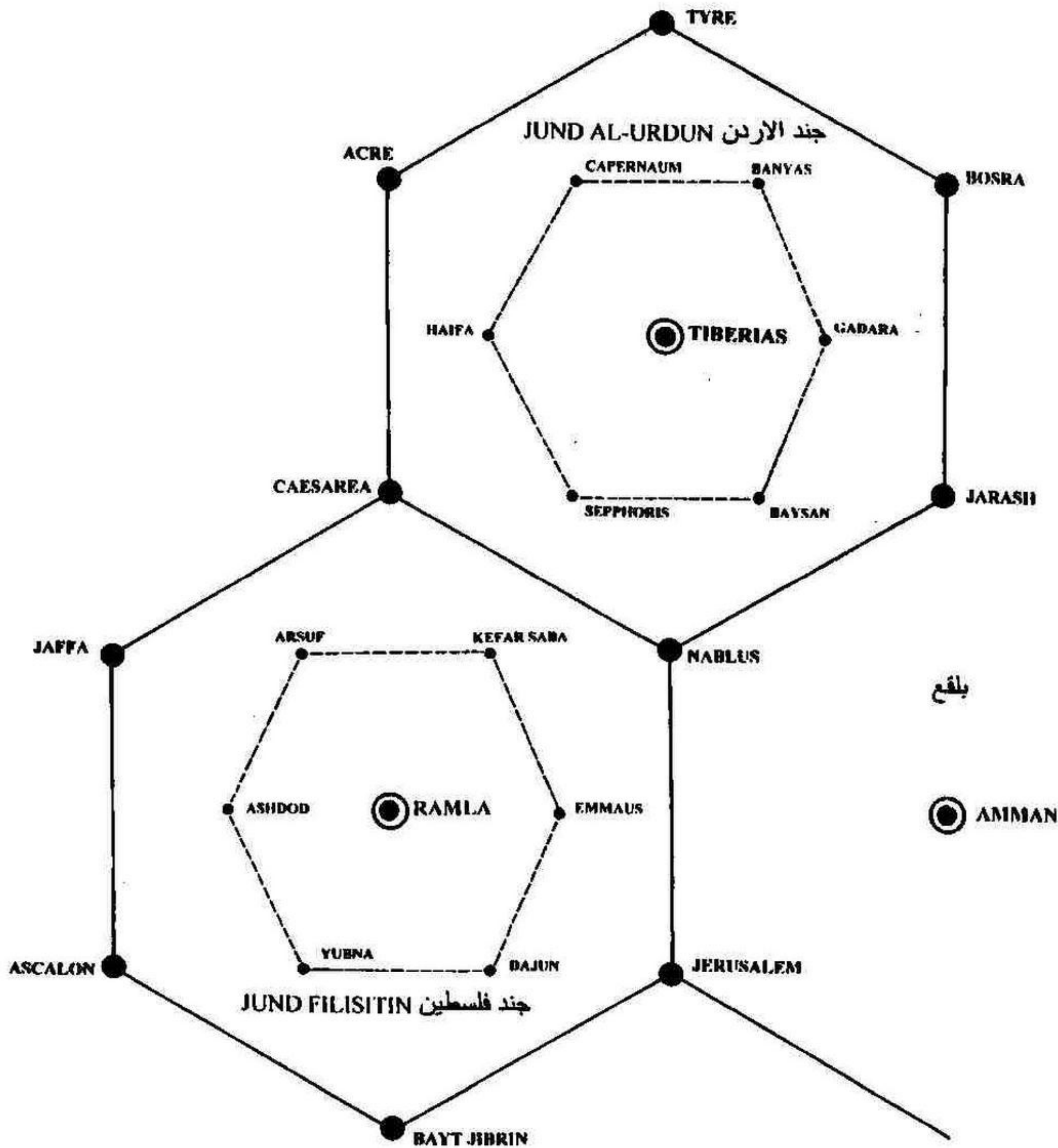


Figure 10. Palestine: towns in the early Islamic period according to Central Place theory.

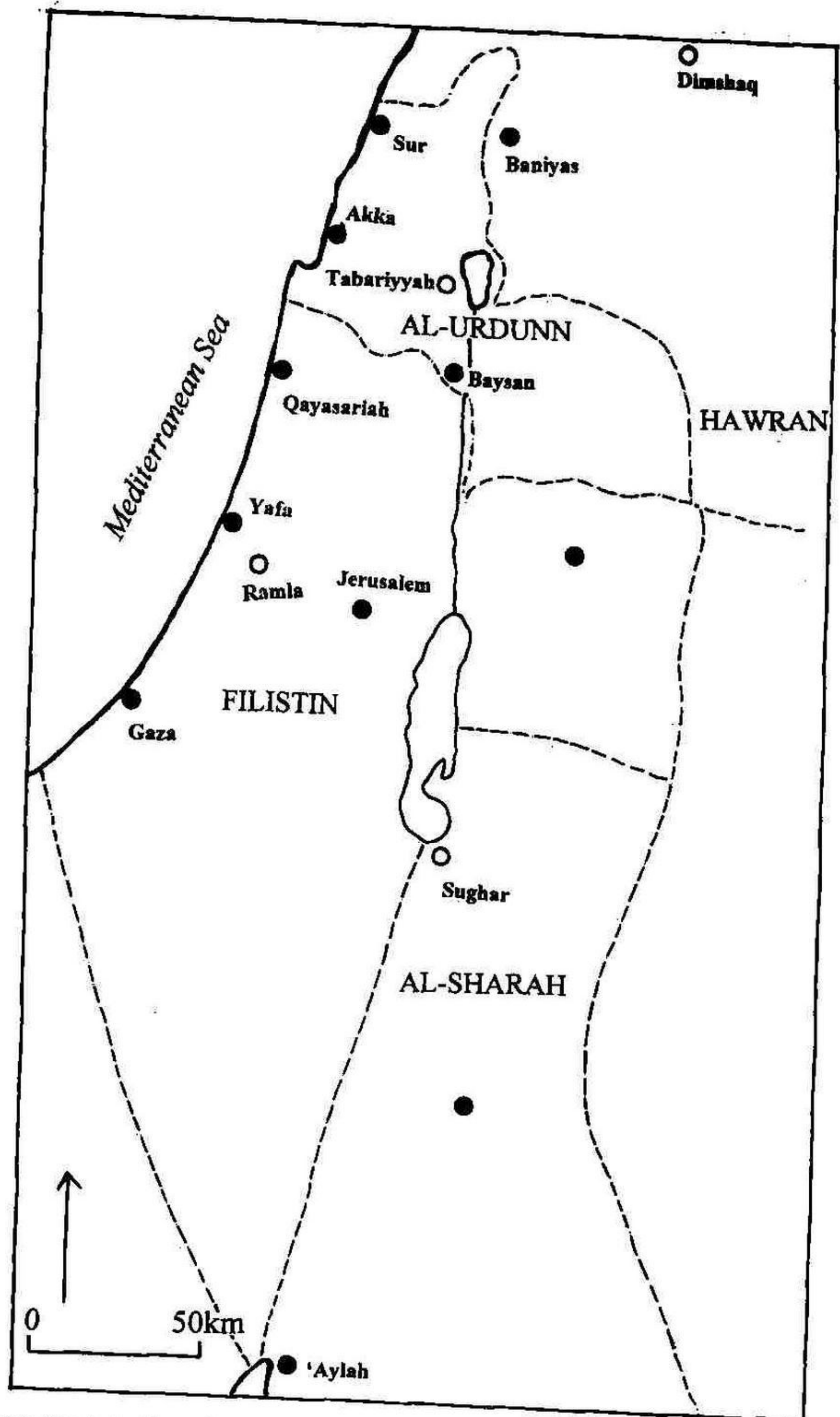


Figure 11. Palestine during the tenth century, administrative divisions (after Walmsley 2001, 517).

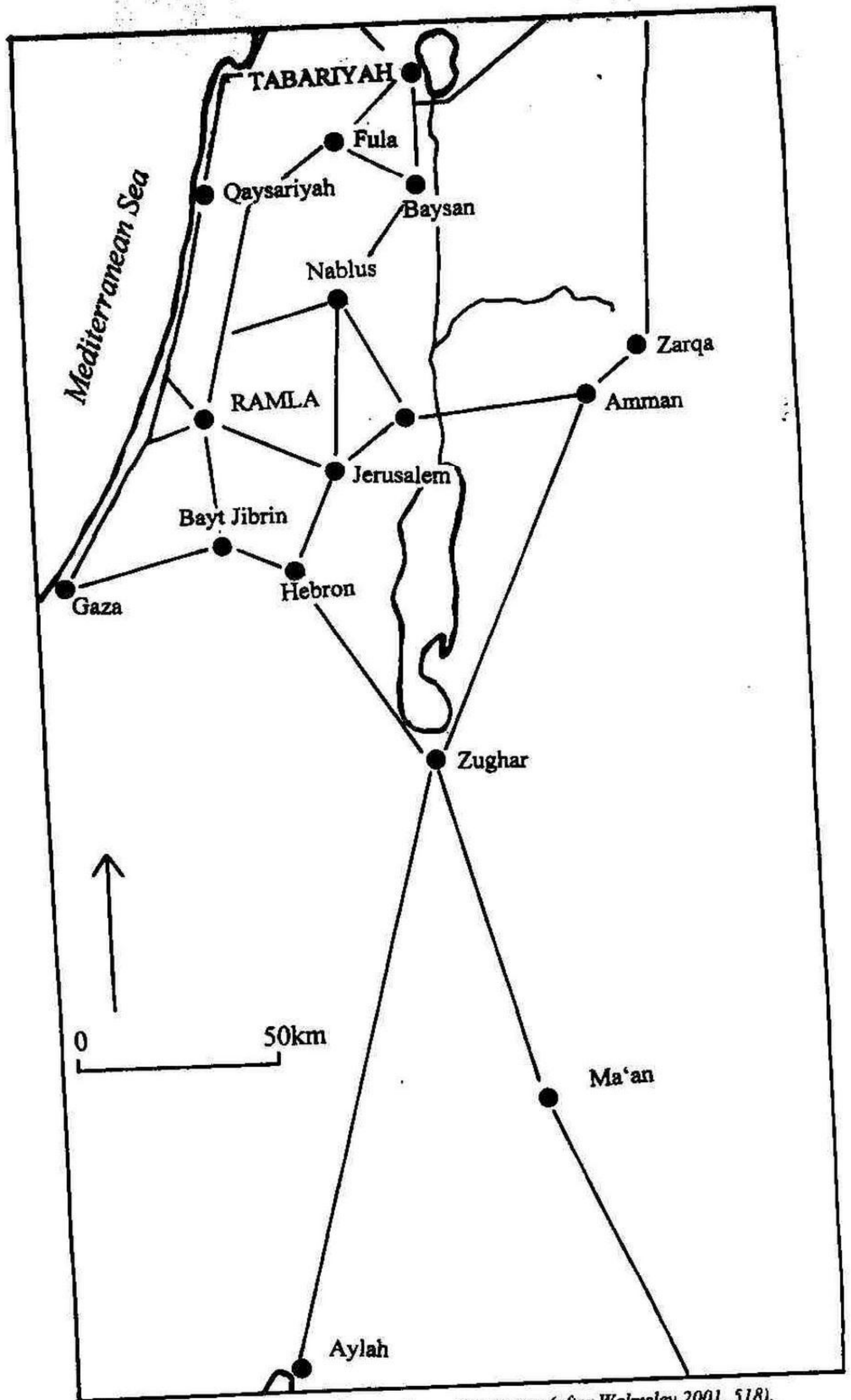


Figure 12. Palestine in the tenth and eleventh centuries; major routes (after Walmsley 2001, 518).

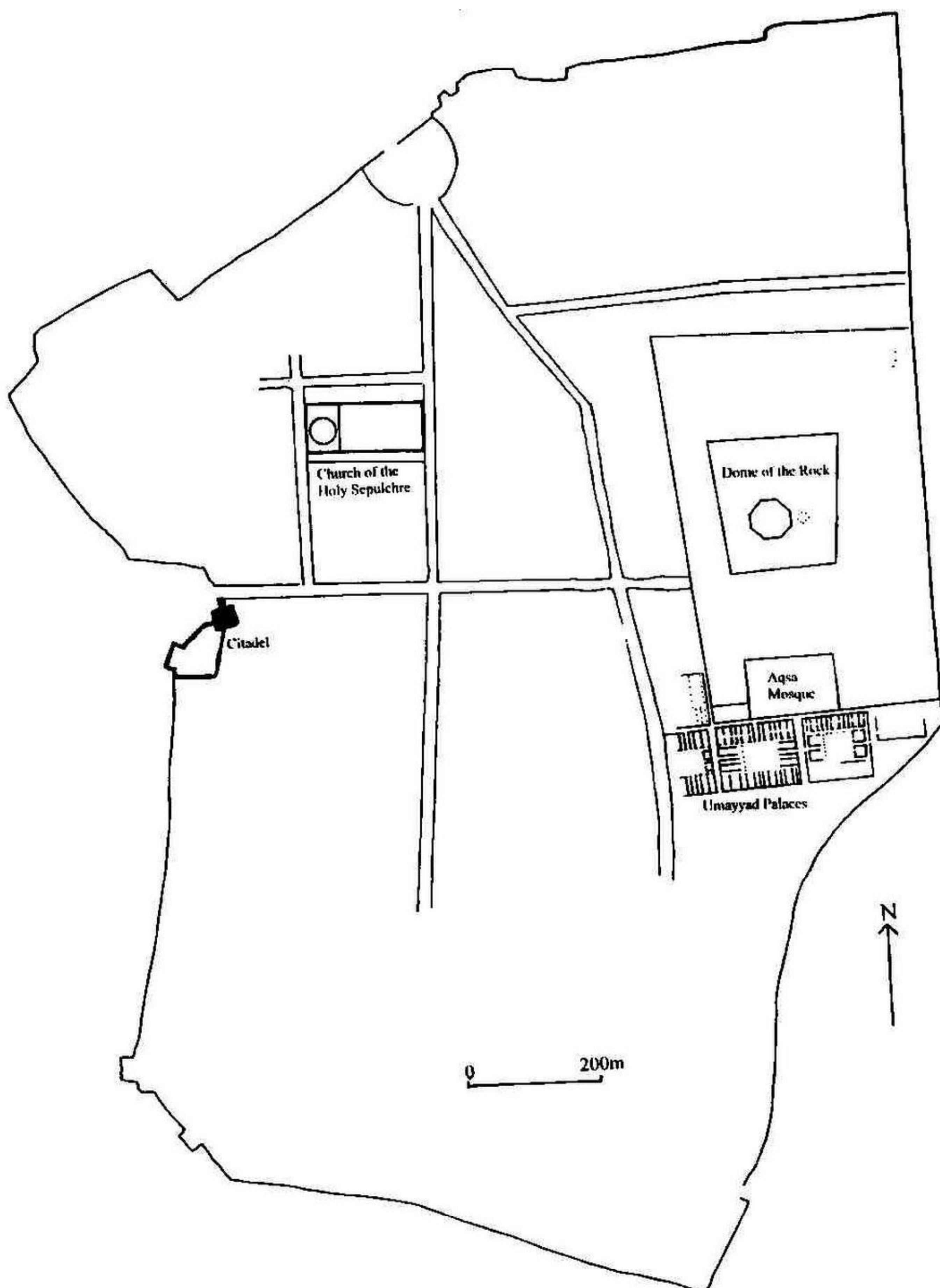
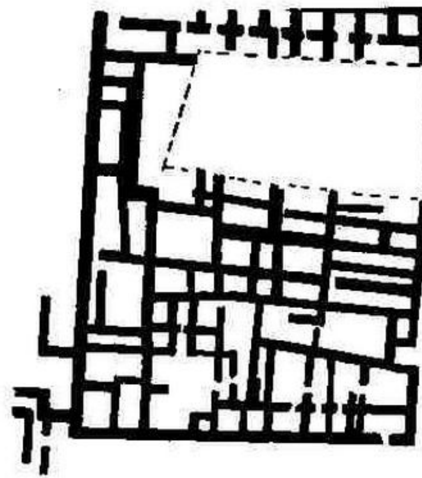
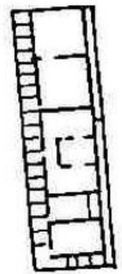
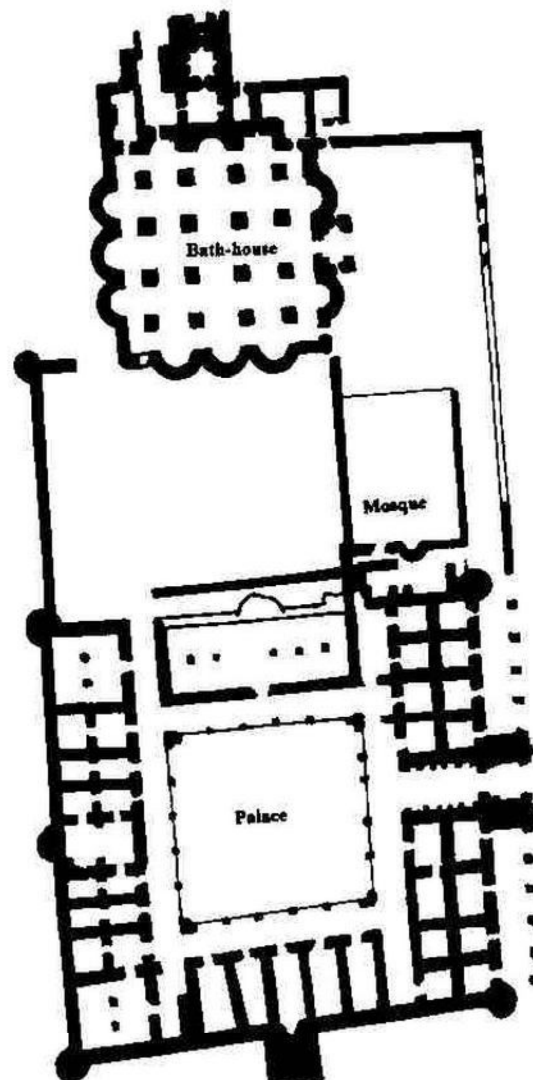


Figure 13. Jerusalem in the Early Islamic period.







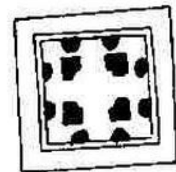
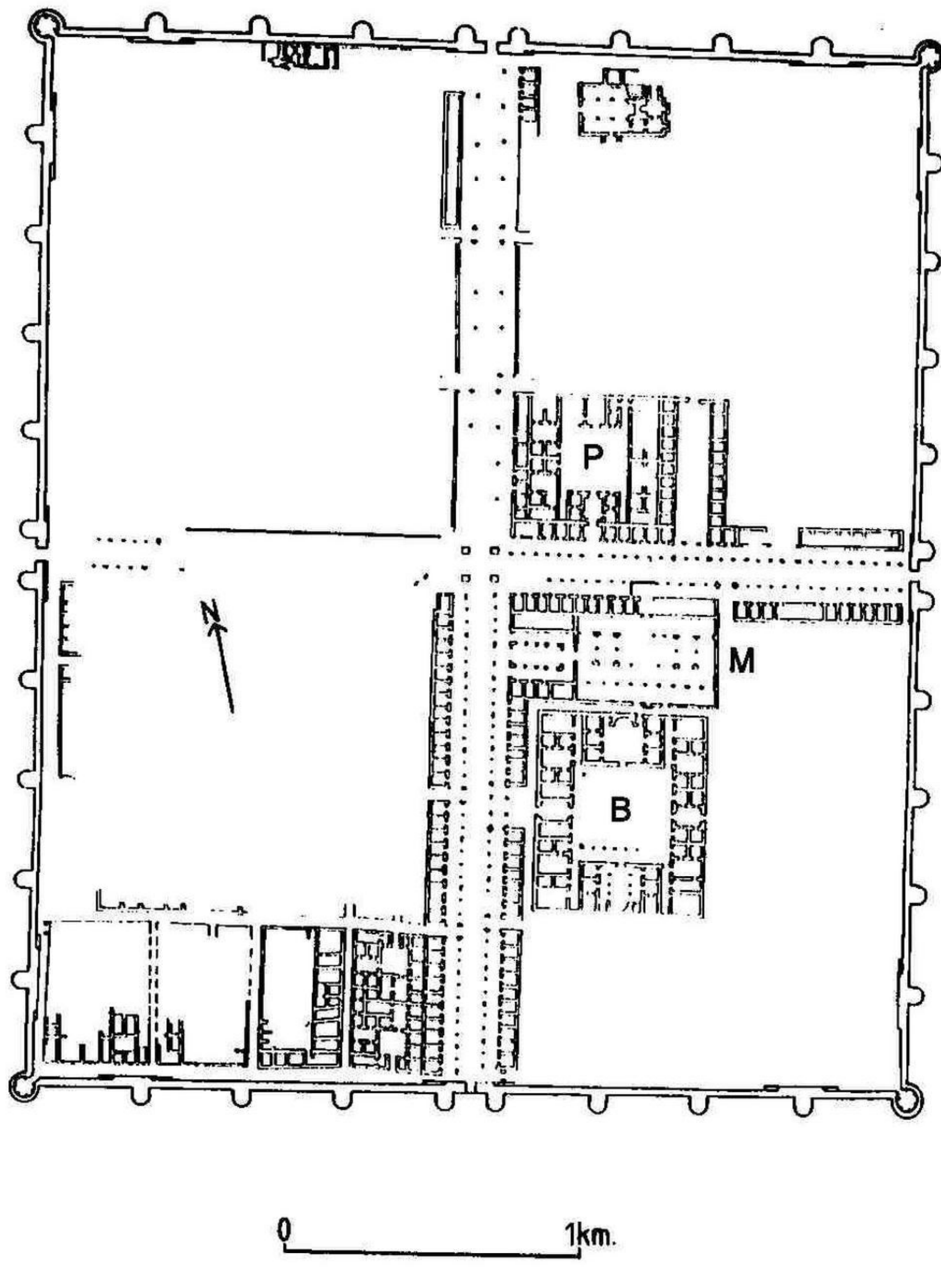


Figure 14. Khirbat al-Mafjar near Jericho. Site plan after recent excavations. From Palestine Antiquities Departme



'Anjar after Creswell

M Mosque B Baths P Palace

Figure 15. 'Anjar after Creswell.

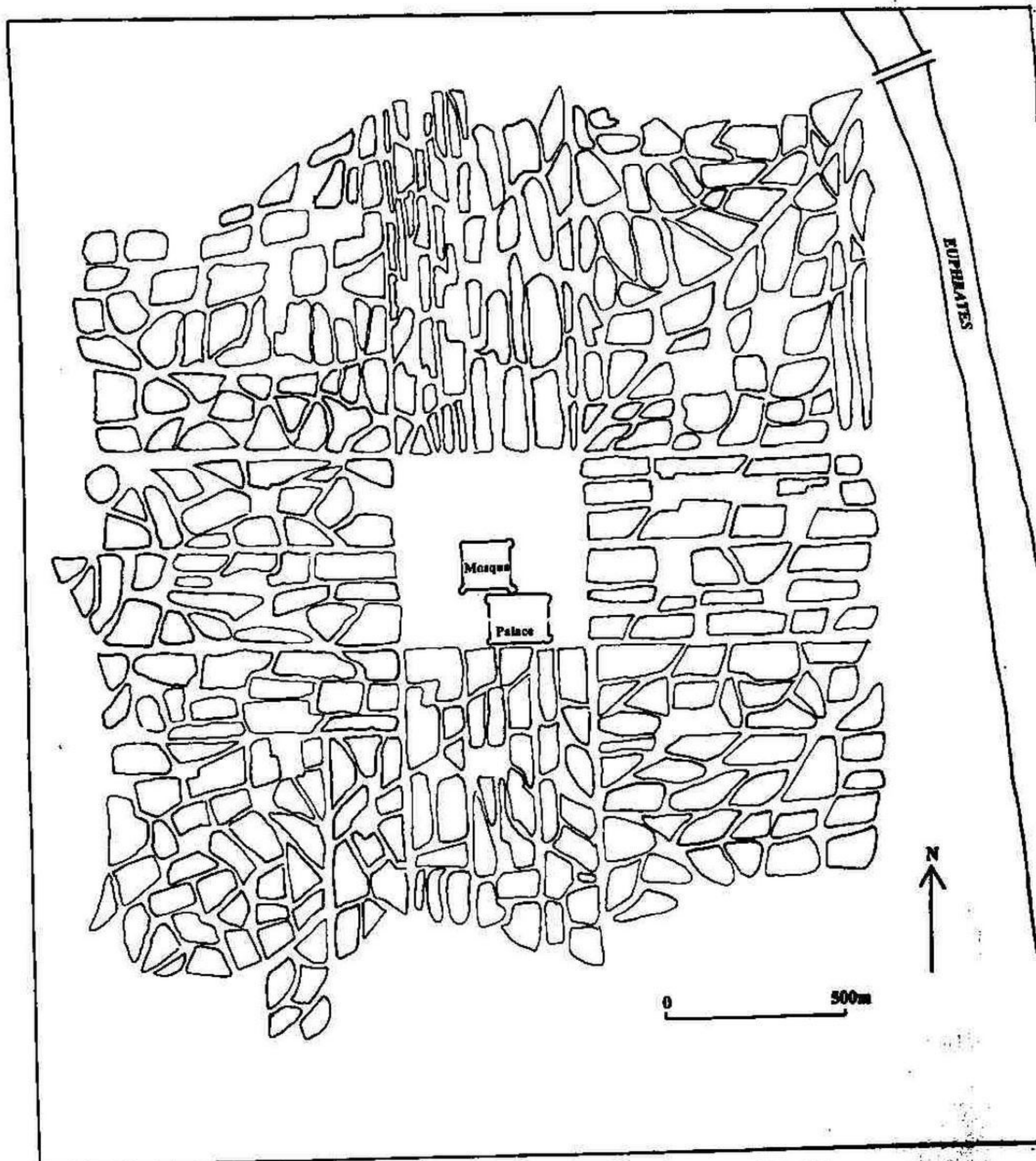


Figure 16. Plan of Kufa in the Umayyad period with tribal divisions (after Djait 1986, 302).

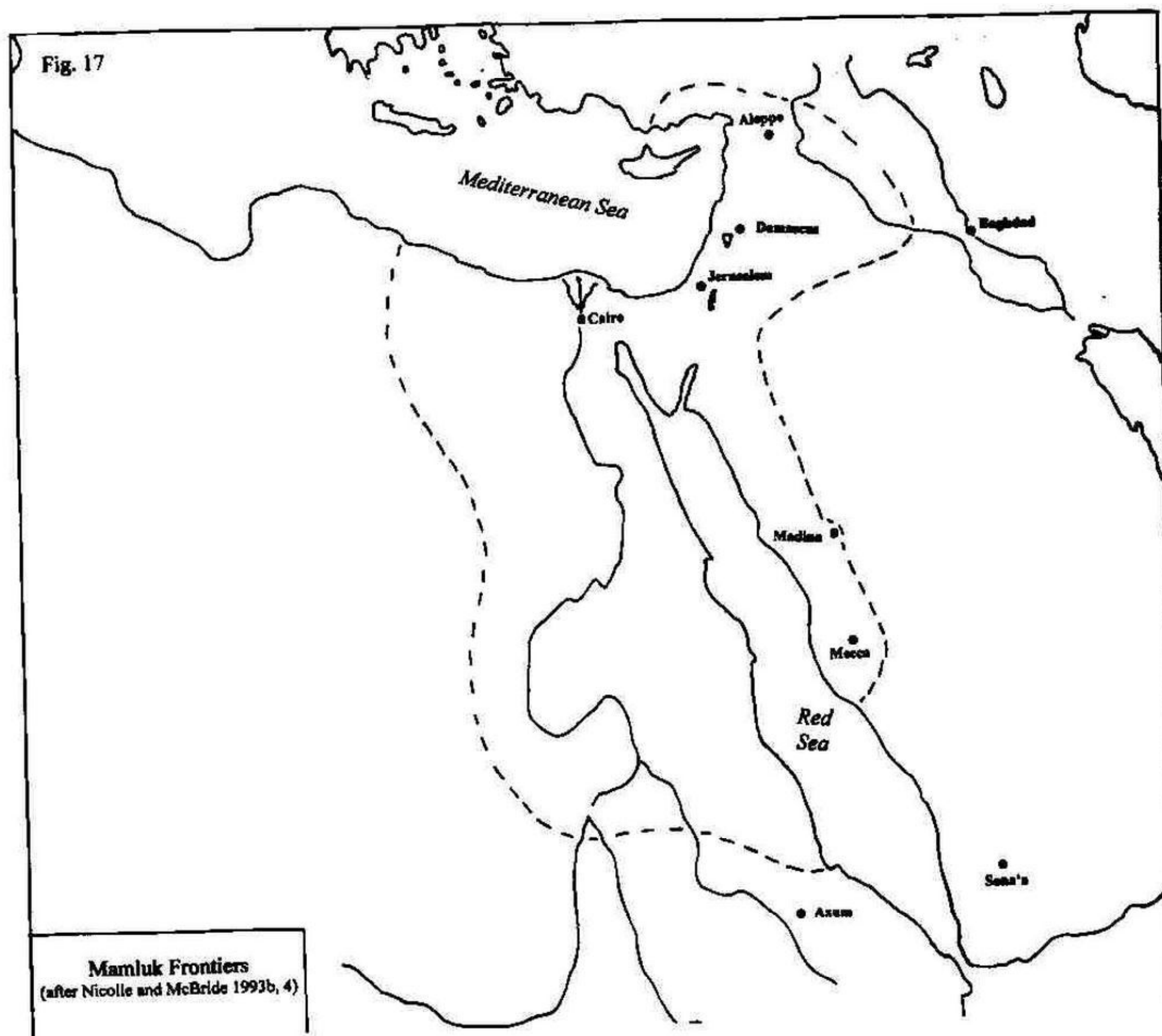


Figure 17. Mamluk territory after Nicolle and McBride (1993b, 4).

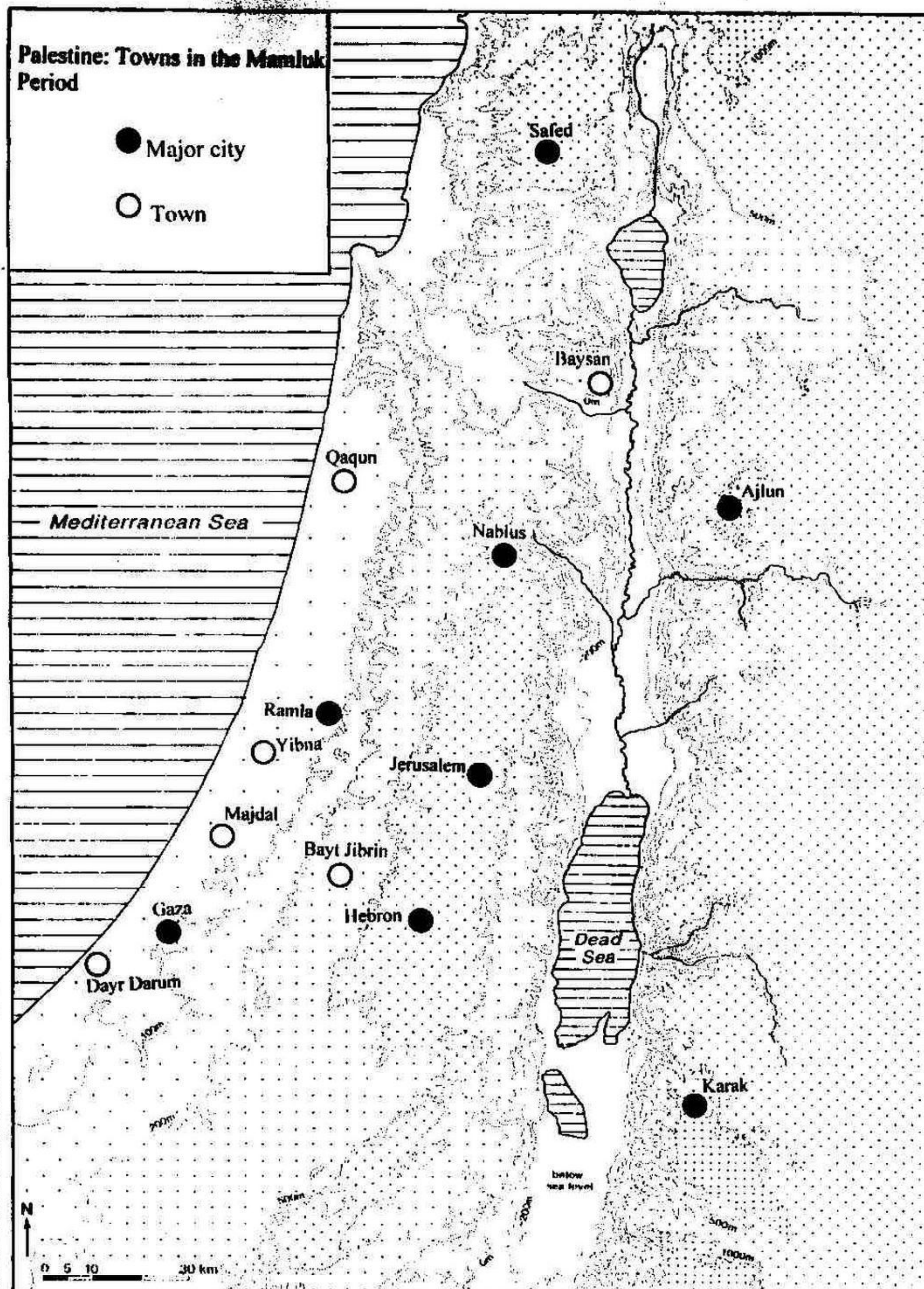


Figure 18. Palestine: towns in the Mamluk period.

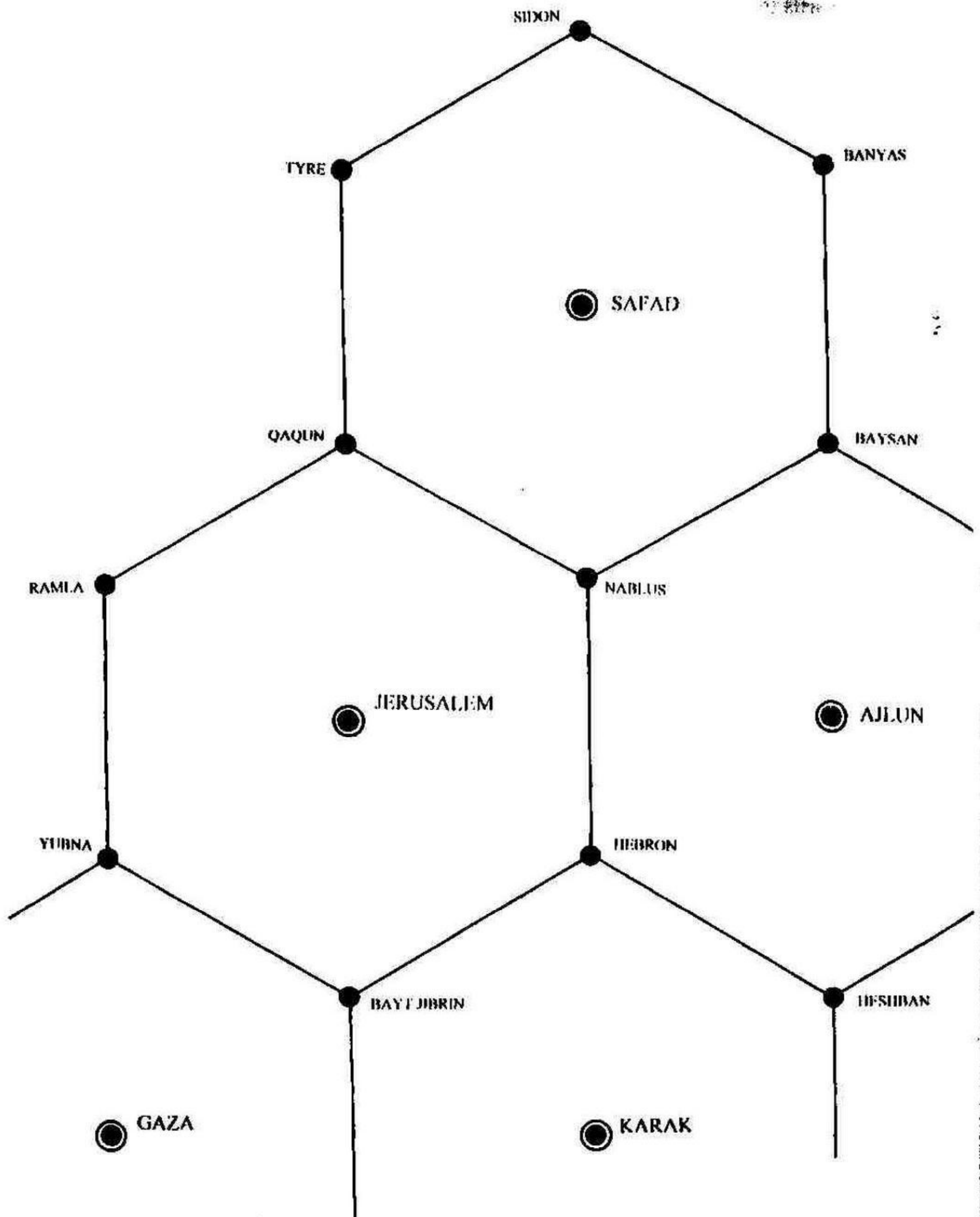


Figure 19. Palestine: towns in the Mamluk period according to Central place theory.

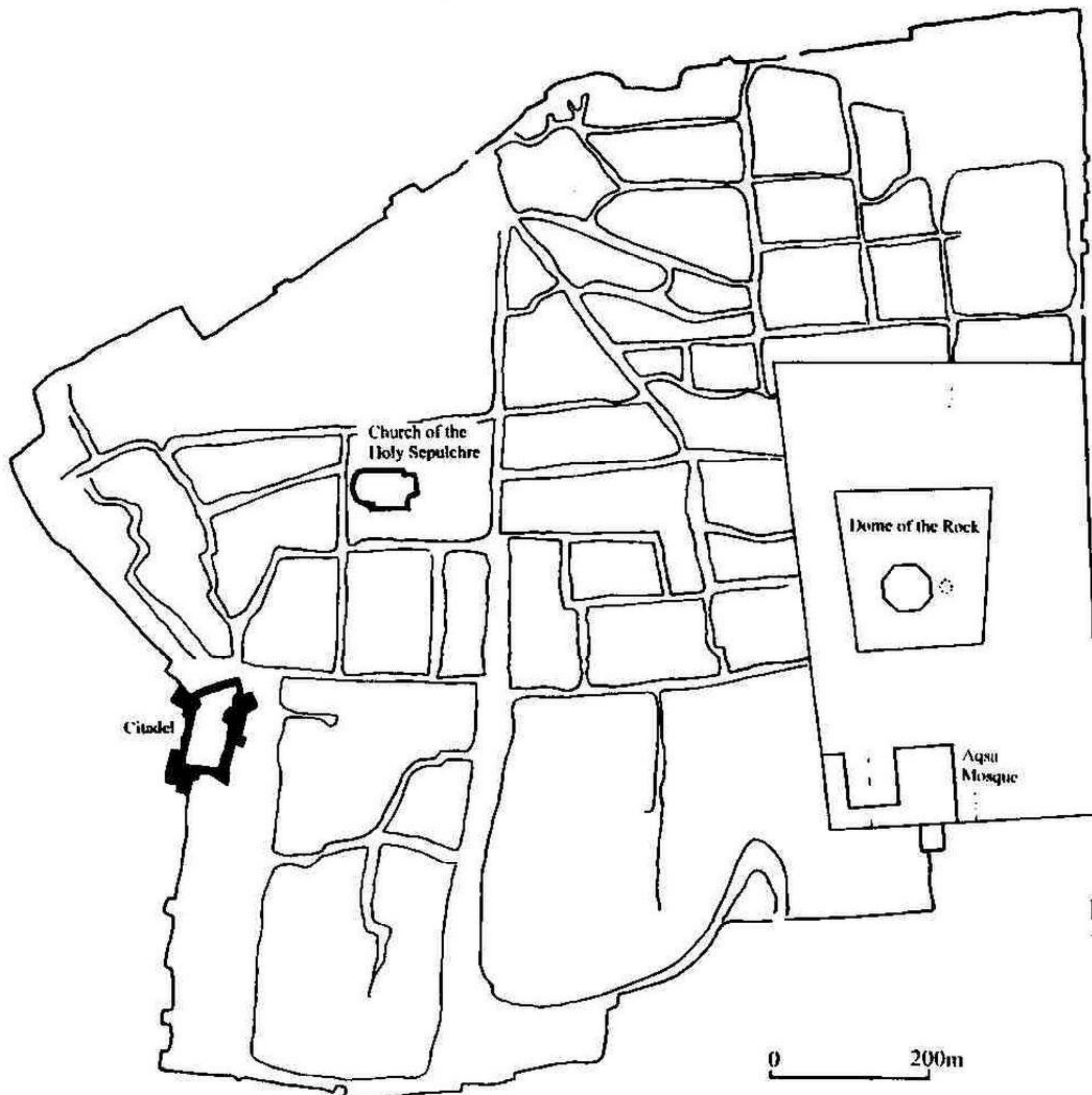


Figure 20. Plan of Jerusalem in the medieval period.

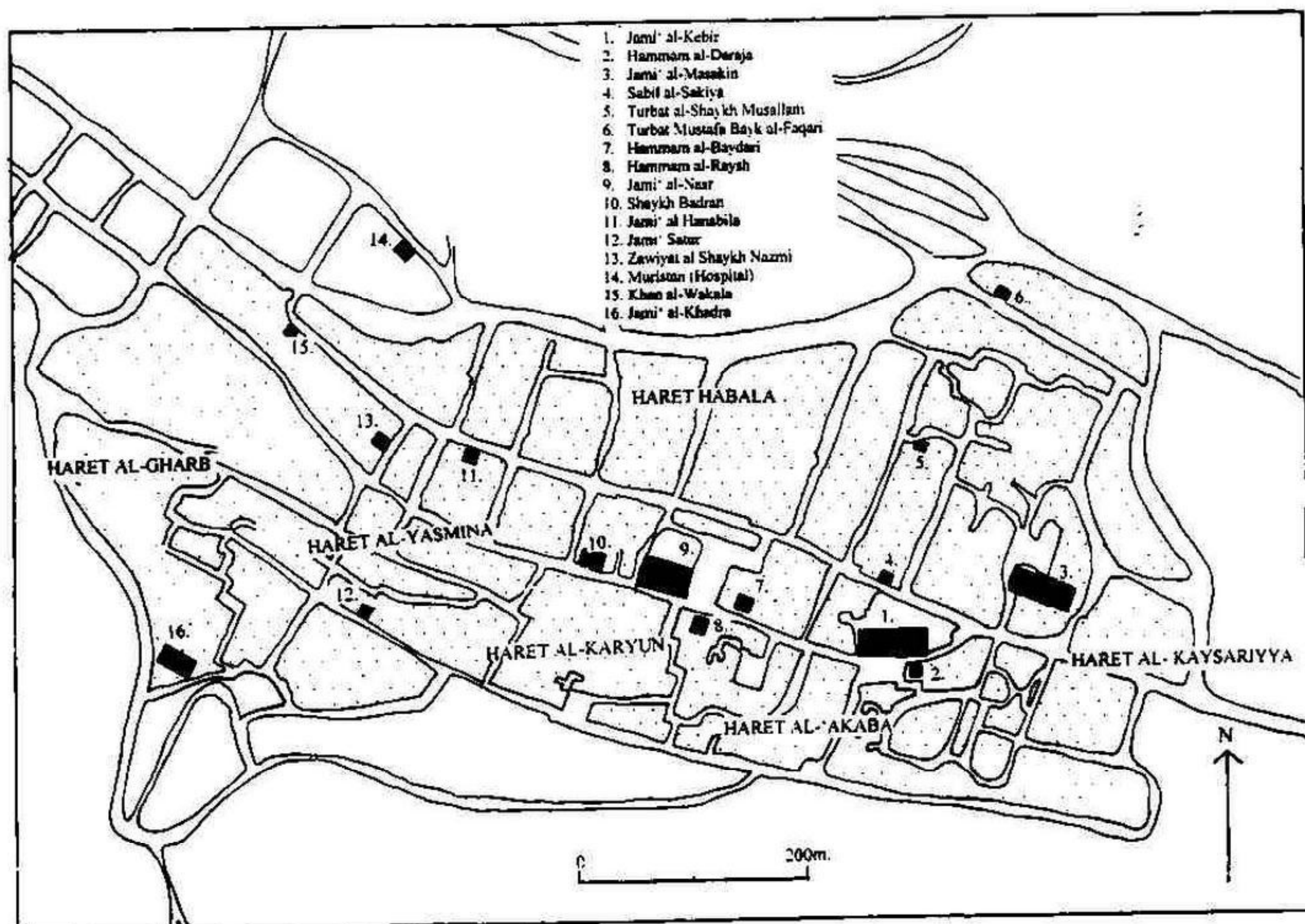


Figure 21. Plan of Nablus in the Mamluk period.

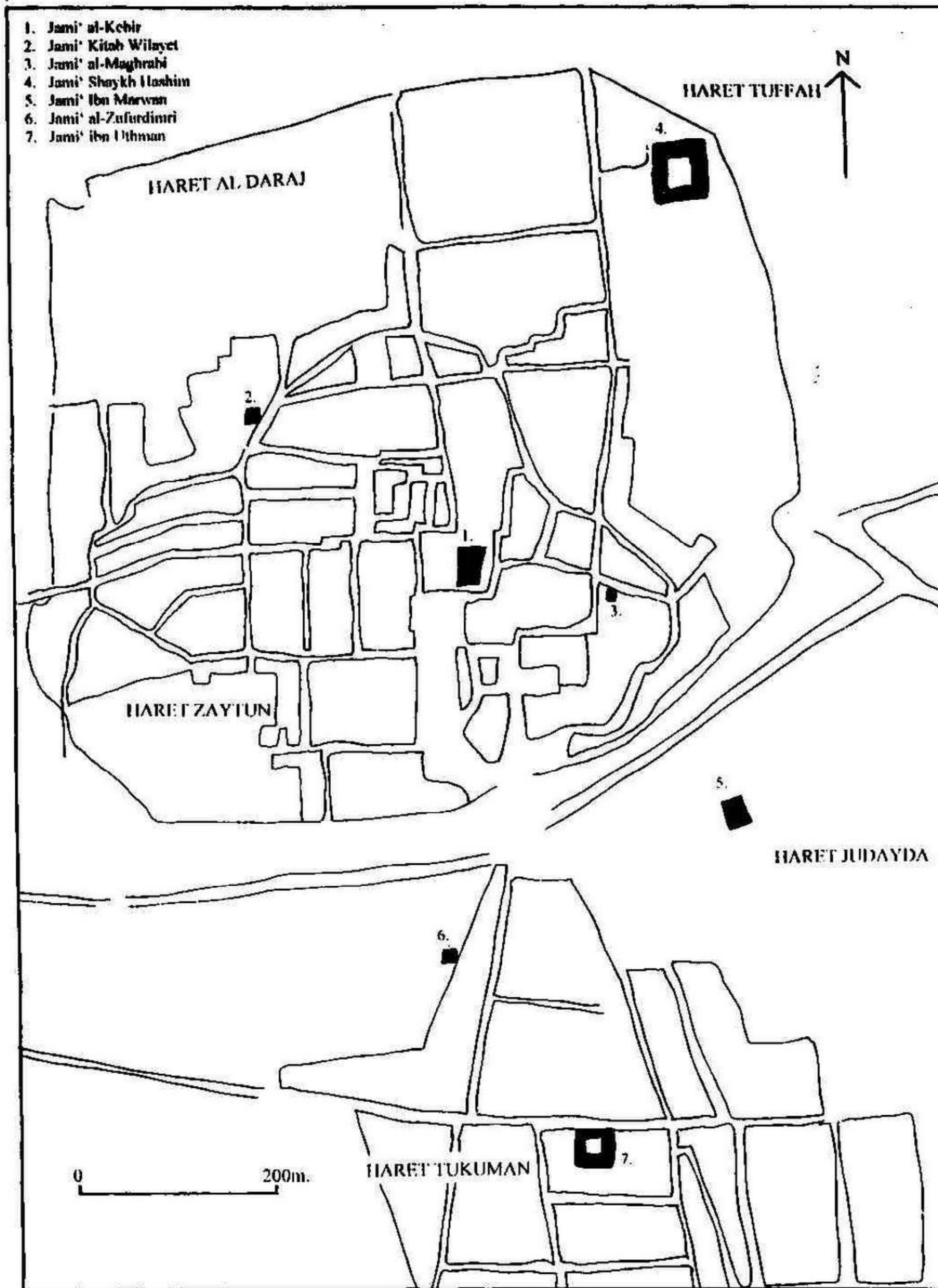
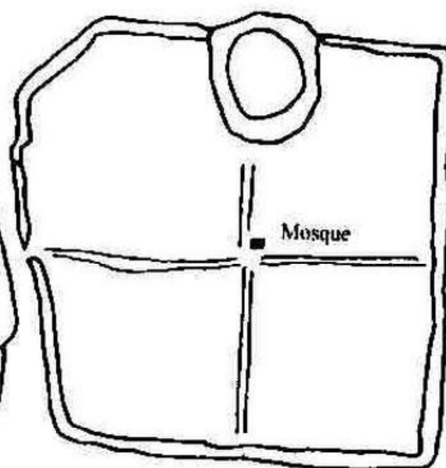


Figure 22. Plan of Gaza in the Mamluk period.

SULTAN KALA (AD 1072)

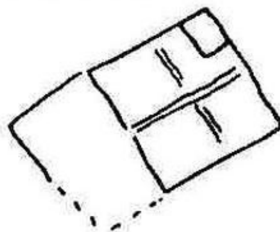


GYAUR KALA (AD 261)





ABDULLAH KHAN KALA (AD1409)



0 1km.

Figure 23. Cities of Merv from the third to fifteenth century AD.

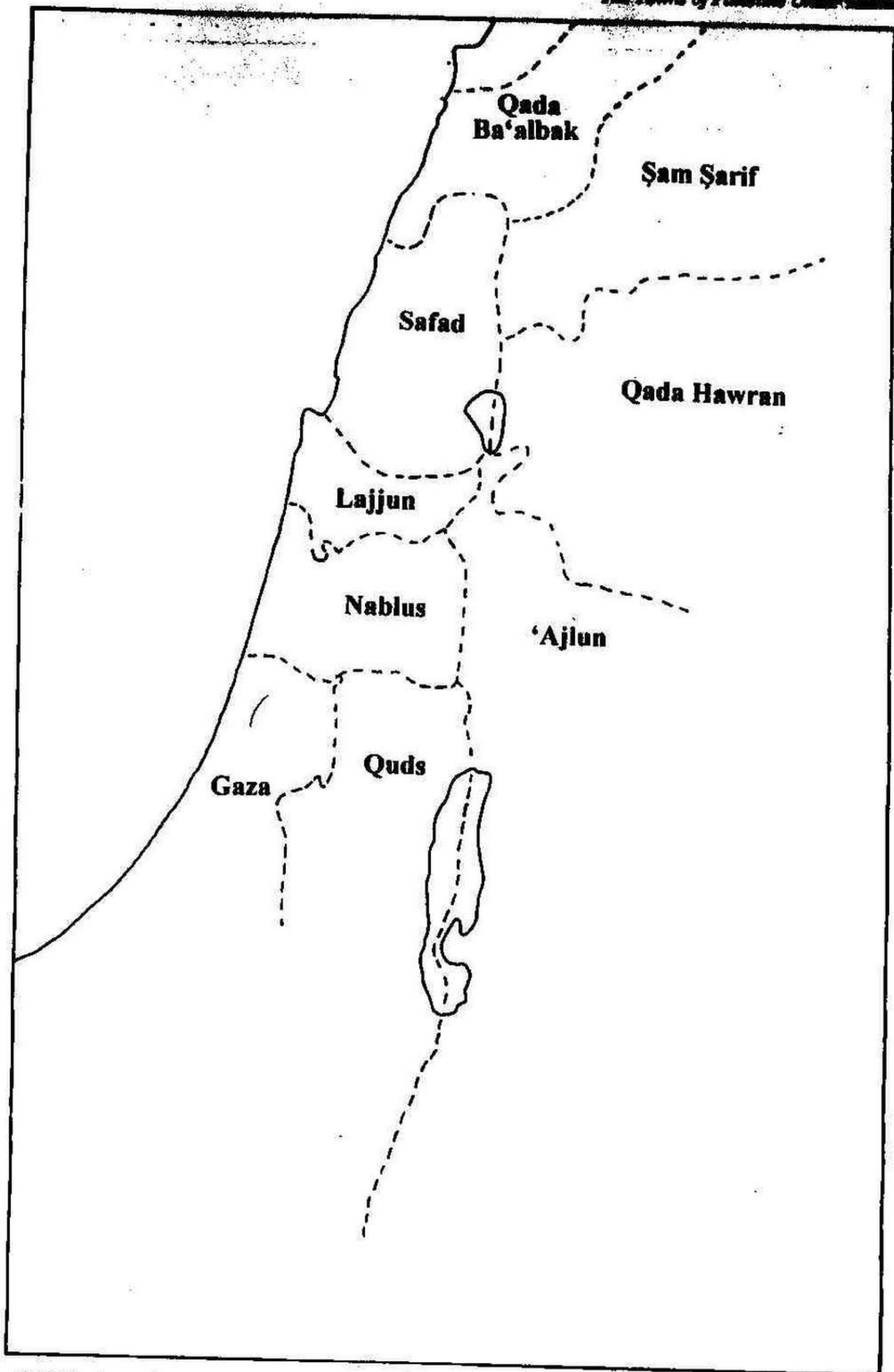


Figure 24. Palestine: administrative districts (liwas) in the sixteenth century (after Hütteroth and Abdulfattah).

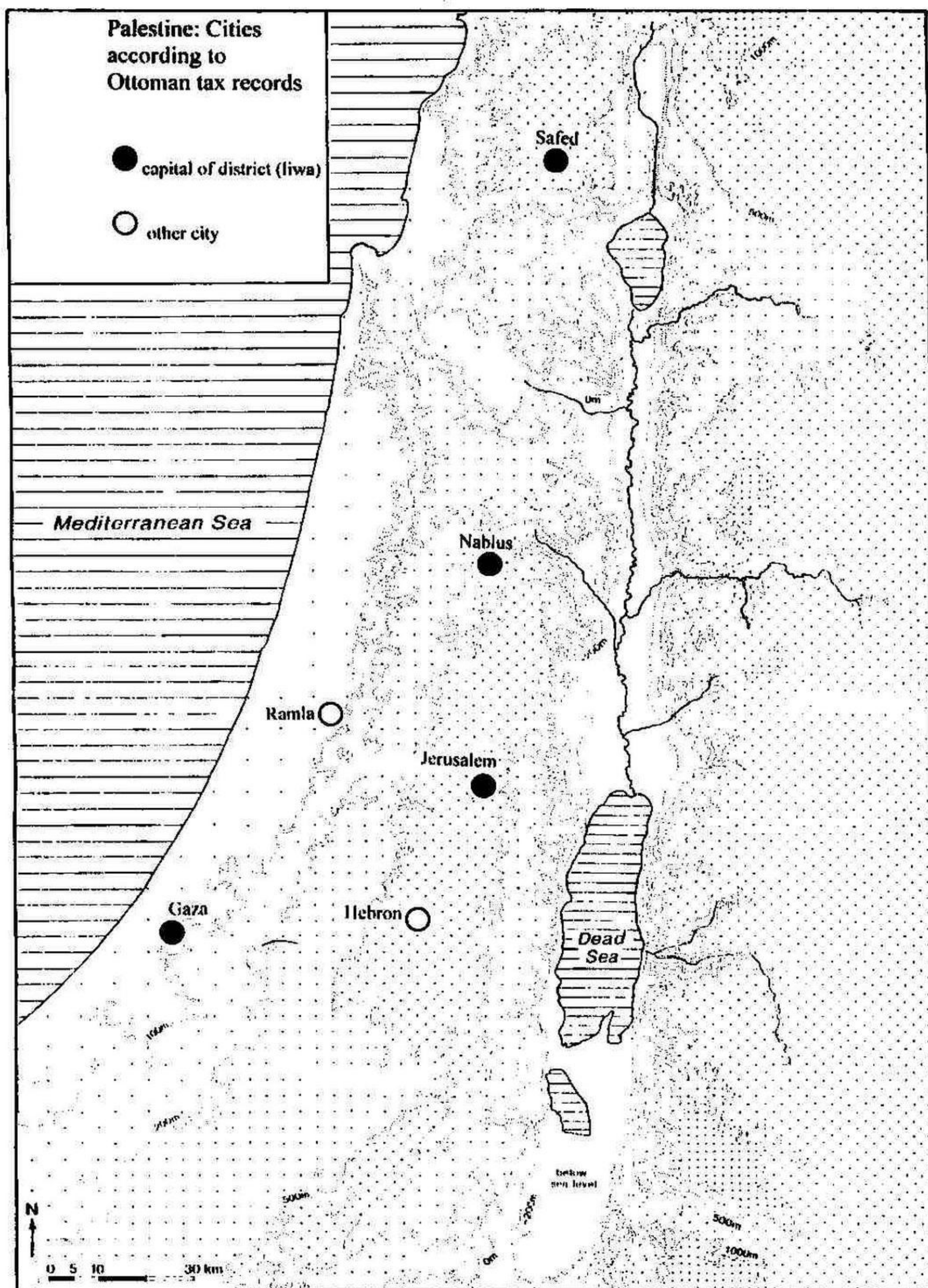


Figure 25. Palestine: cities according to Ottoman tax records.

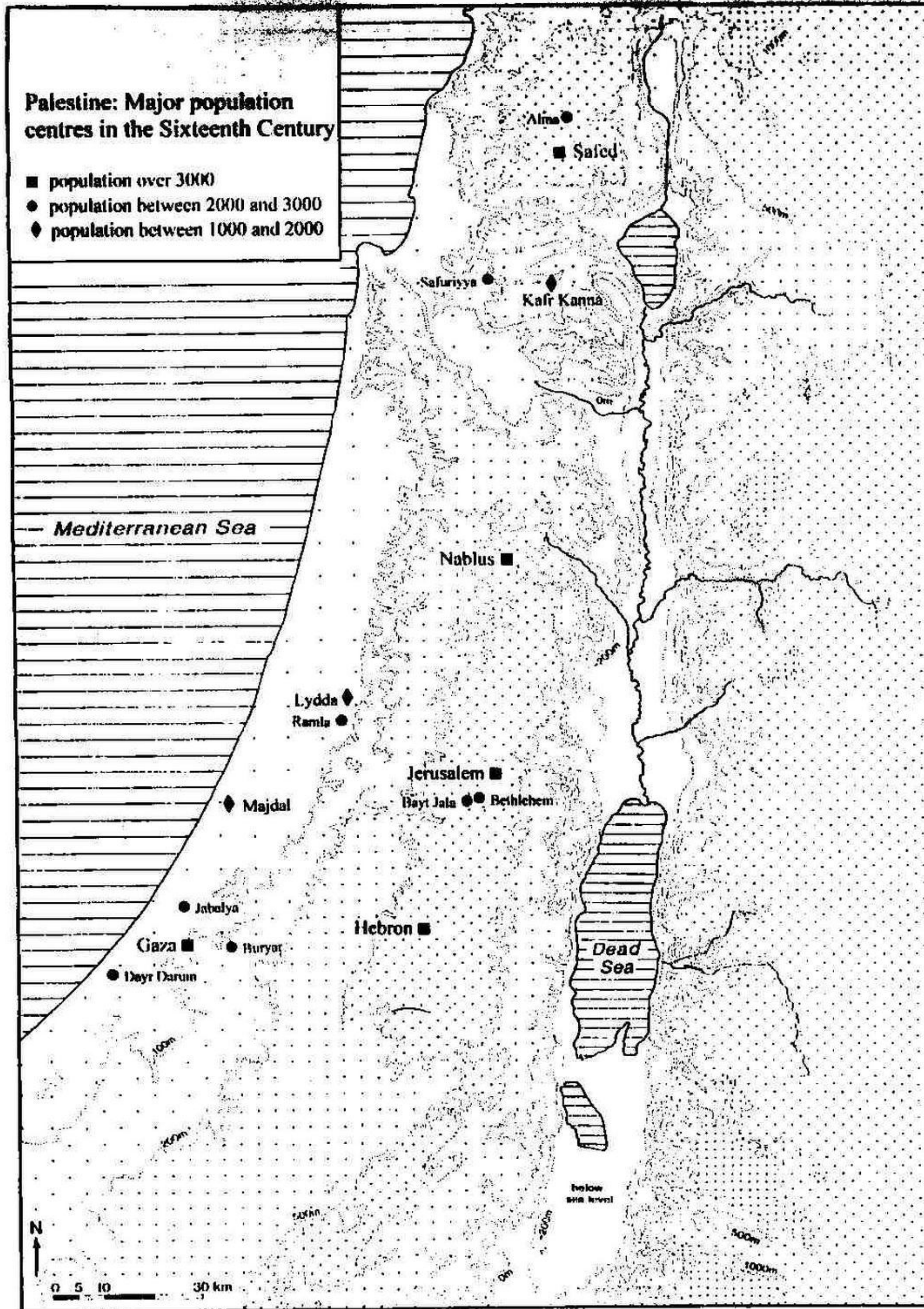


Figure 26. Palestine: major population centres in the sixteenth century.

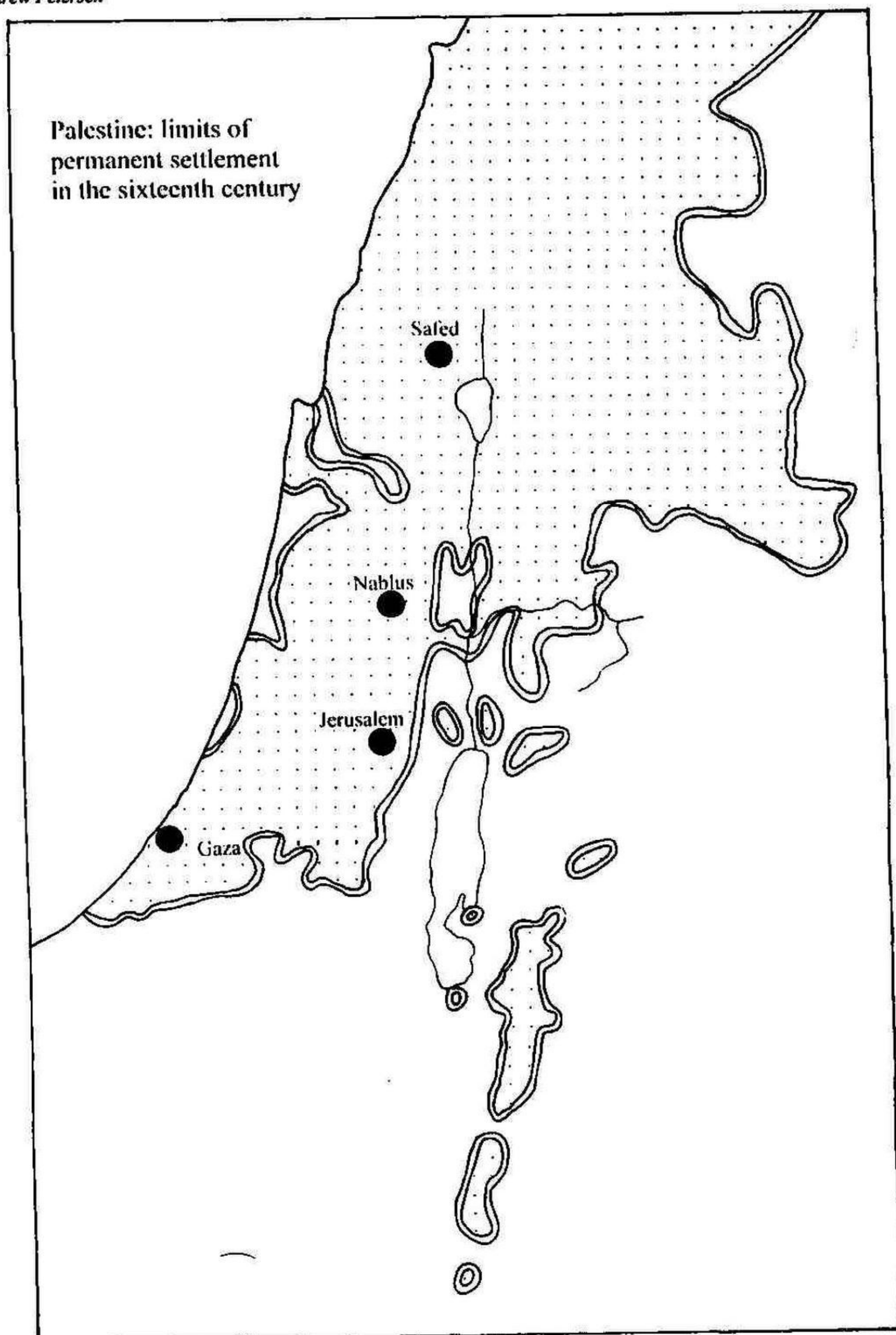


Figure 27. Palestine: limits of permanent settlement in the sixteenth century.

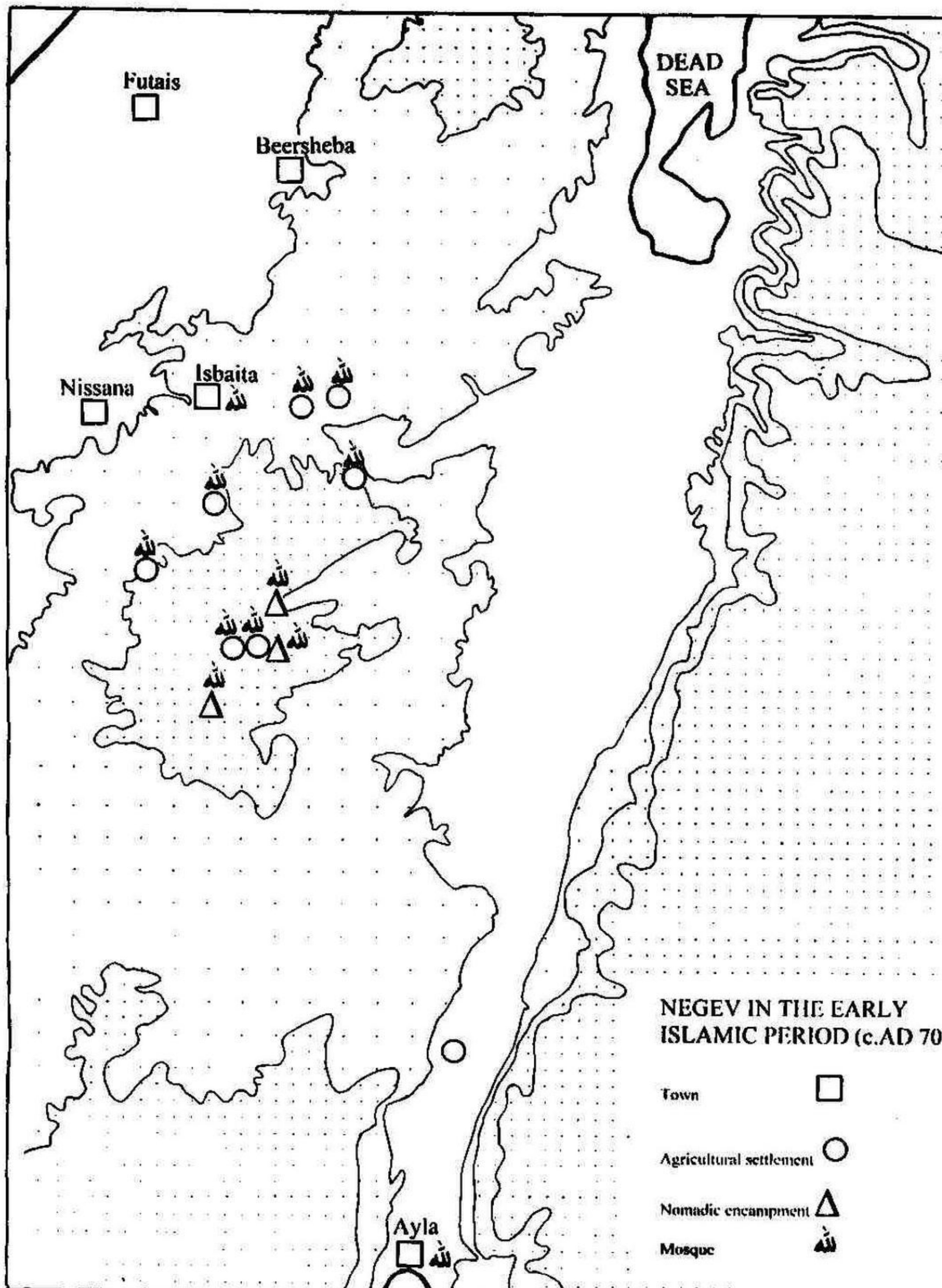


Figure 28. Negev in the early Islamic period with different types of settlement.

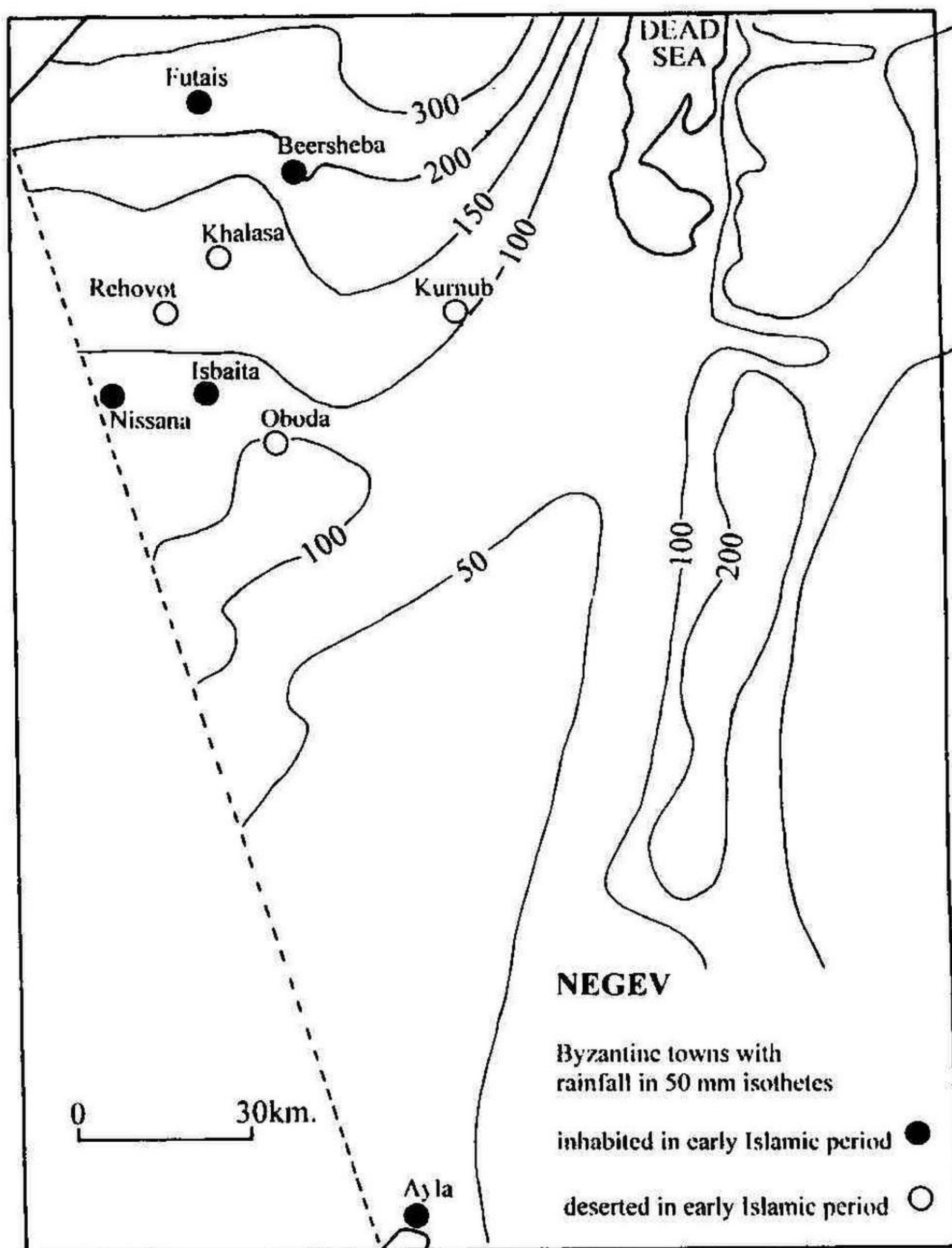


Figure 29. Negev with towns inhabited in Byzantine and early Islamic period with rainfall indicated in isothetes.

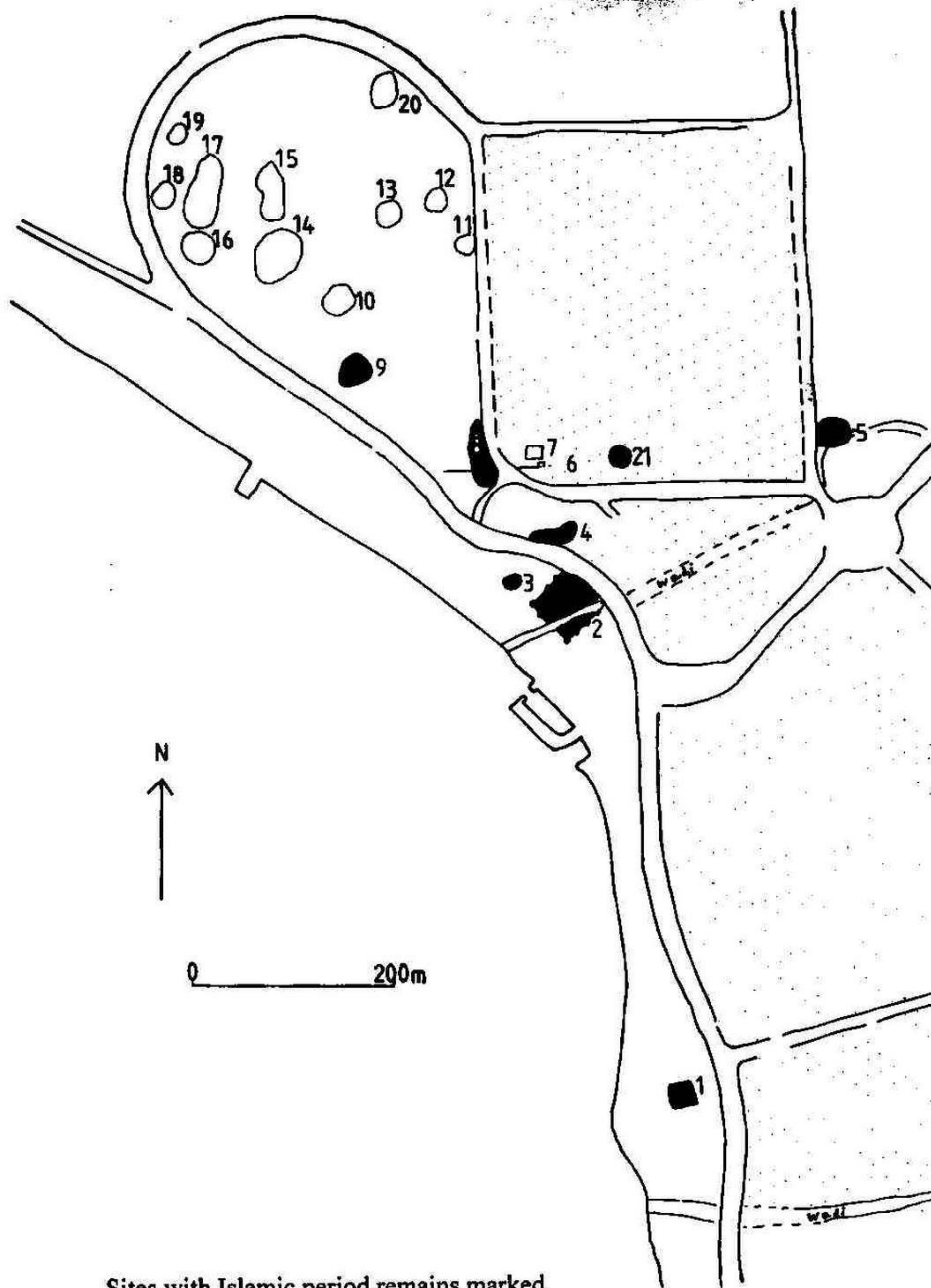
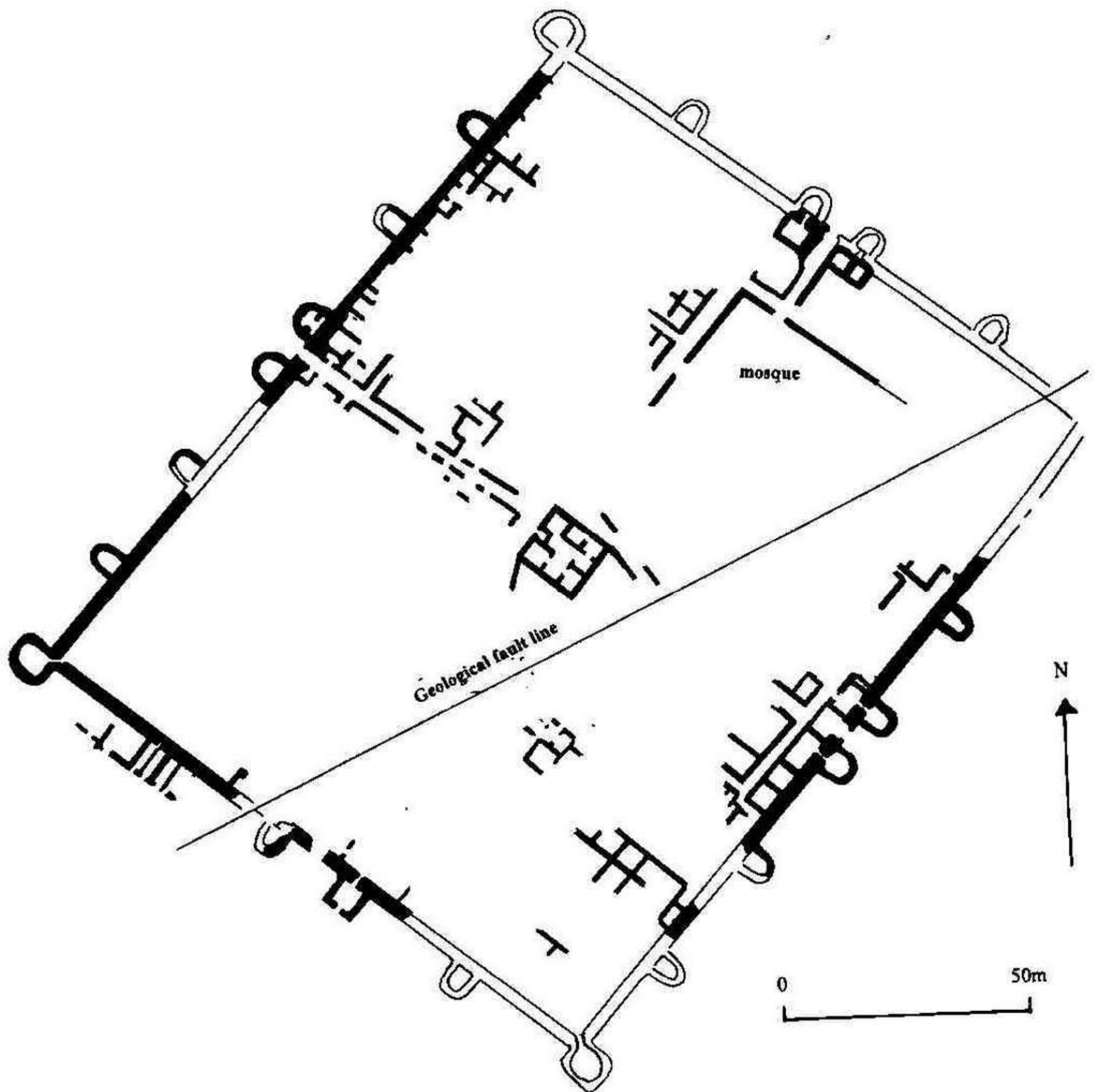


Figure 30. 'Aqaba map of archaeological sites.

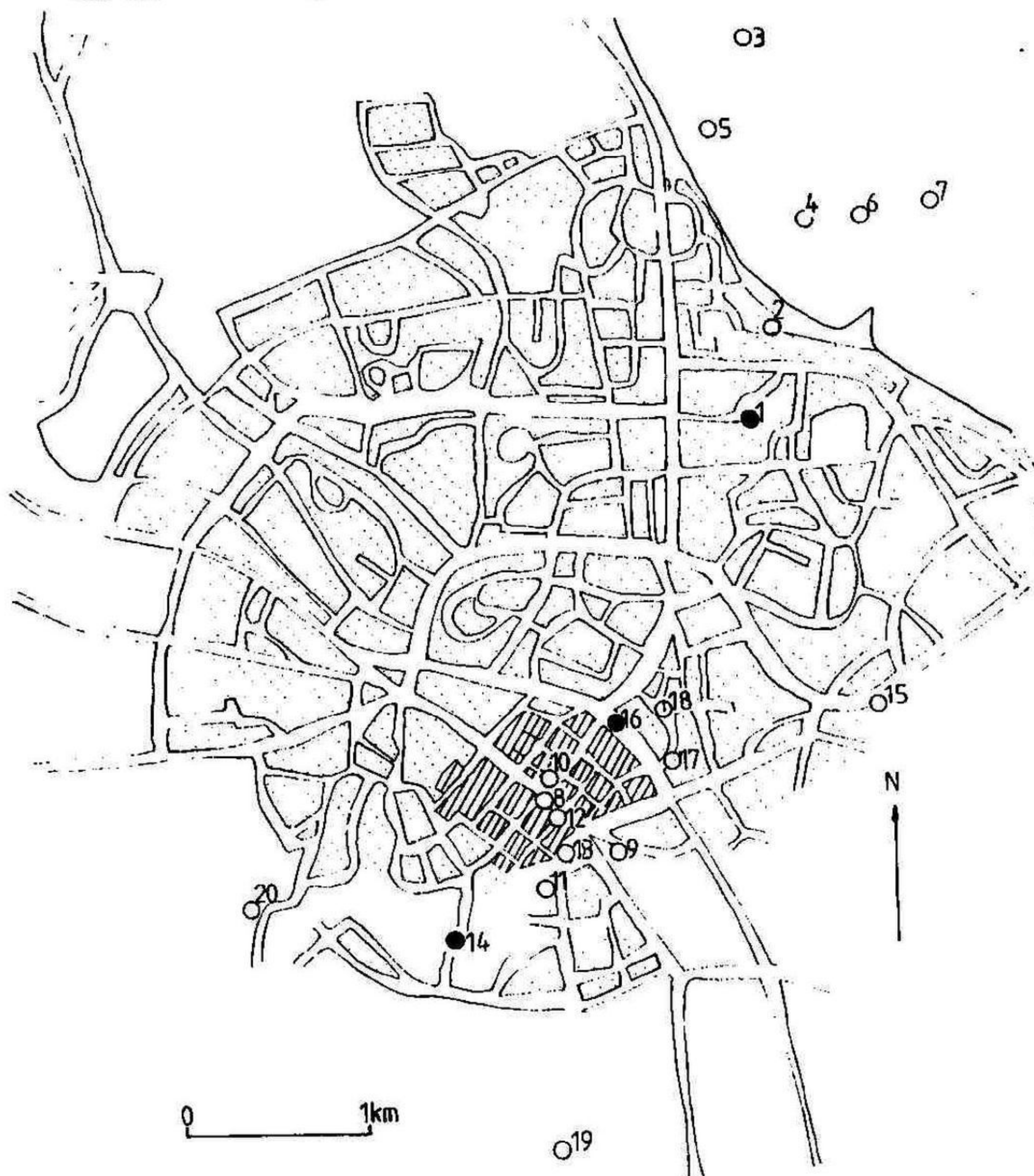


Islamic Aqaba
University of Chicago excavations at 'Ayla (al-'Aqaba) 1986-92
(after Whitcomb)

Figure 31. Islamic 'Aqaba after Whitcomb.

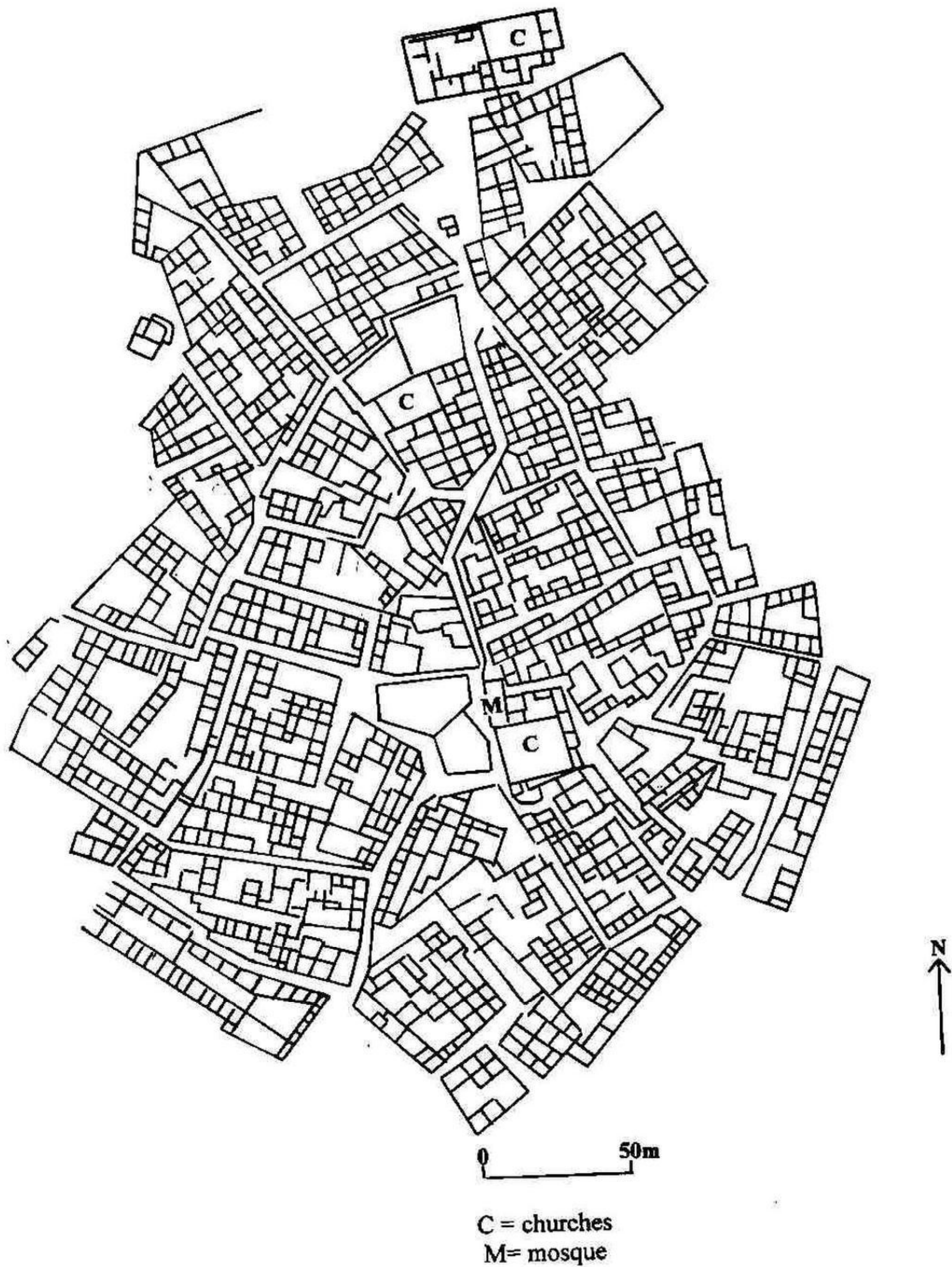


Figure 32. Beersheba excavated archaeological sites, with Islamic remains marked.



Sites with graves or cemeteries marked

Figure 33. Beersheba excavated archaeological sites, with cemeteries and graves marked as black circle.



(after Brimer and Baruch 1981, 228)

Figure 34. Plan of Isbaita with churches and mosques indicated (after Brimer 1981, 228).

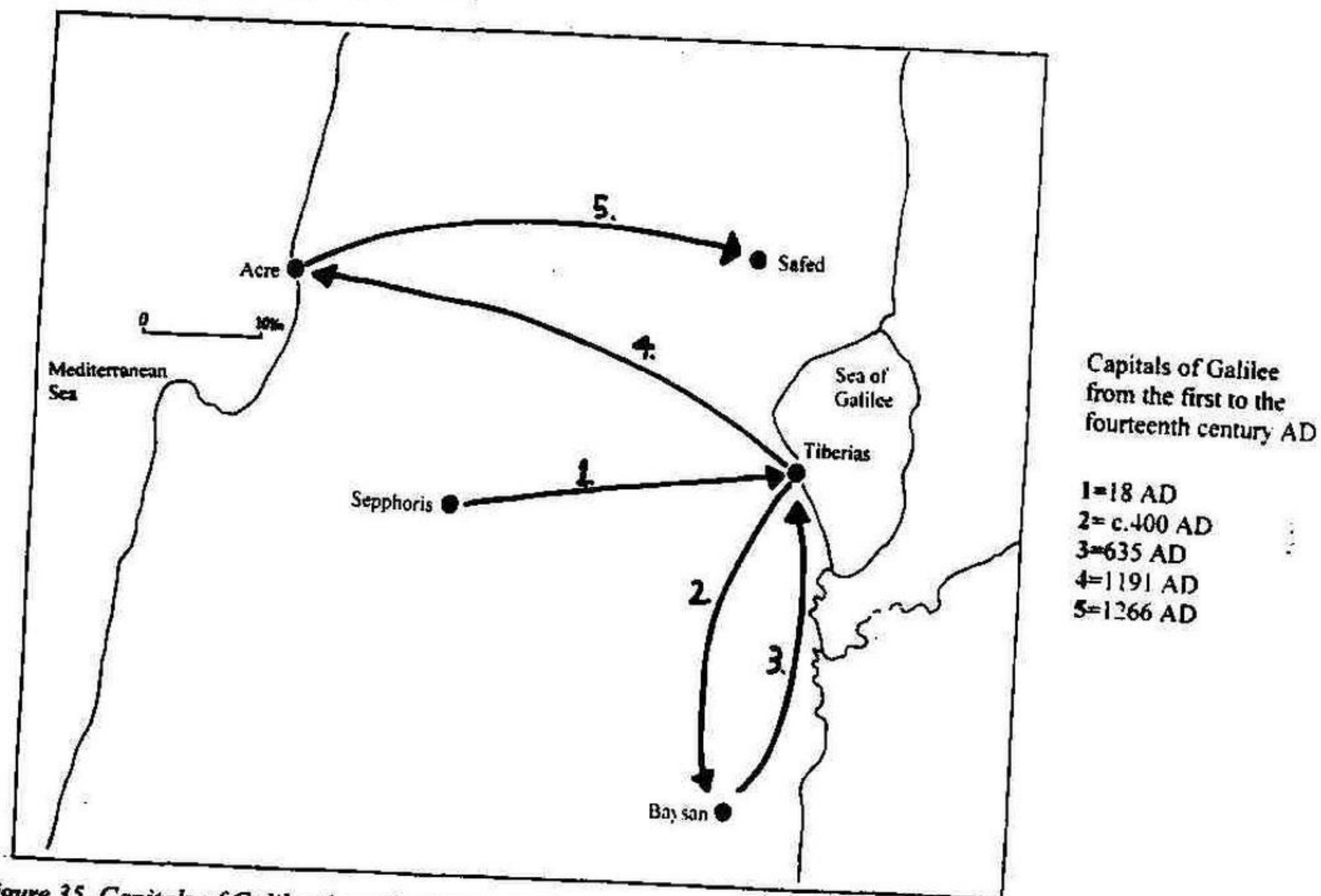


Figure 35. Capitals of Galilee from the first to the fourteenth century AD.

Acre
0
10km
Haifa
Mediterranean
Sea
Sea of
Galilee
Tiberias
Sepphoris
O Nazareth
Qaymun O
Baysan

Figure 36. Urban centres in Galilee during the early Islamic period.

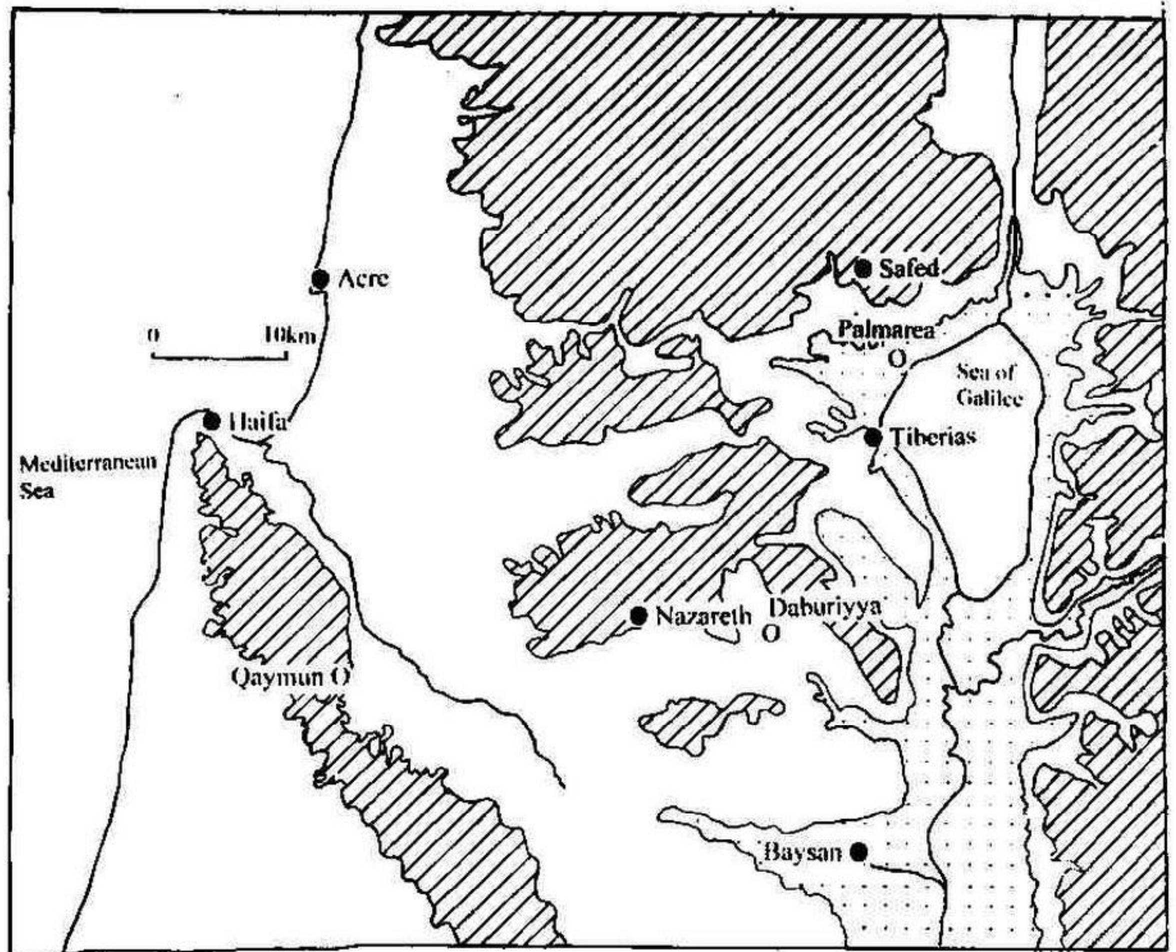


Figure 37. Urban centres in Galilee during the Crusader period.

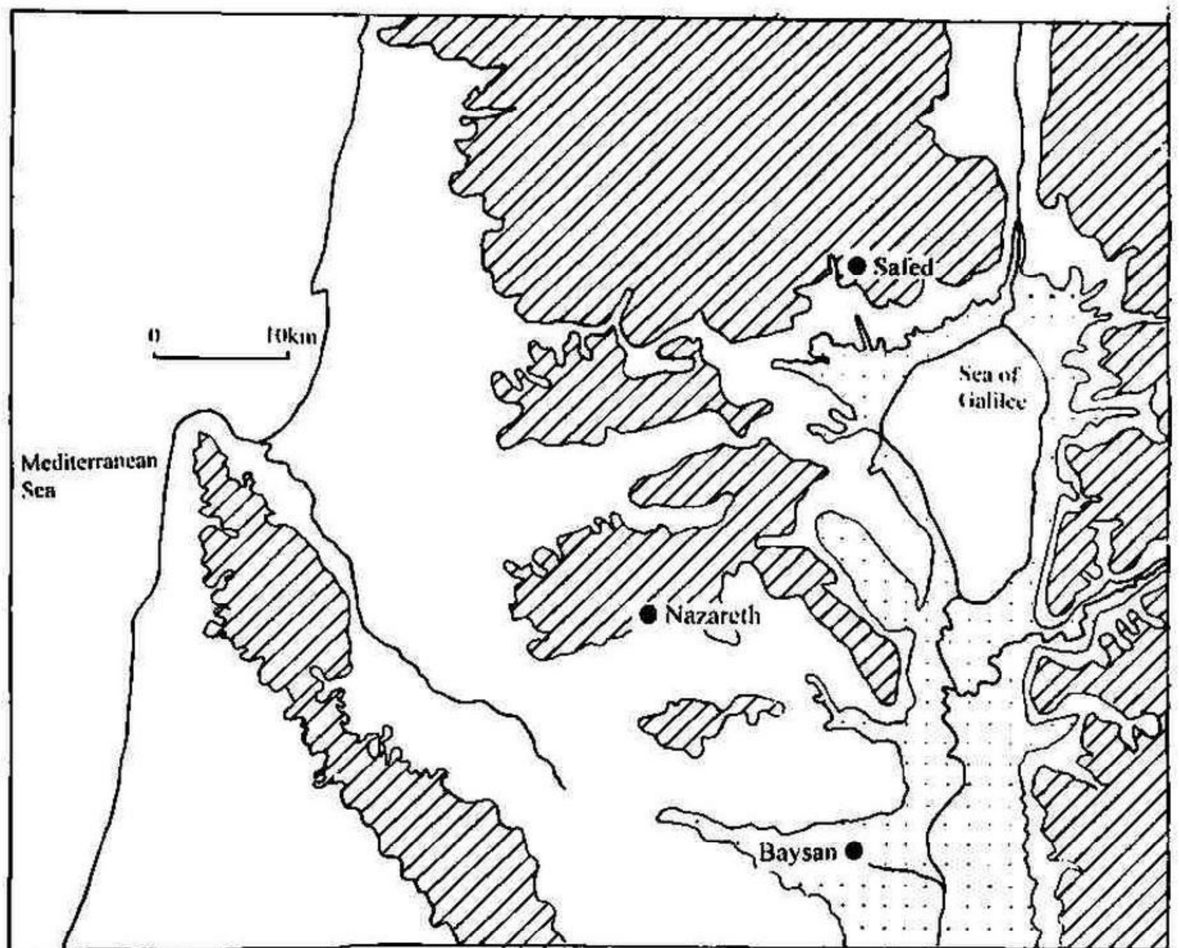


Figure 38. Urban centres in Galilee during the Mamluk period.

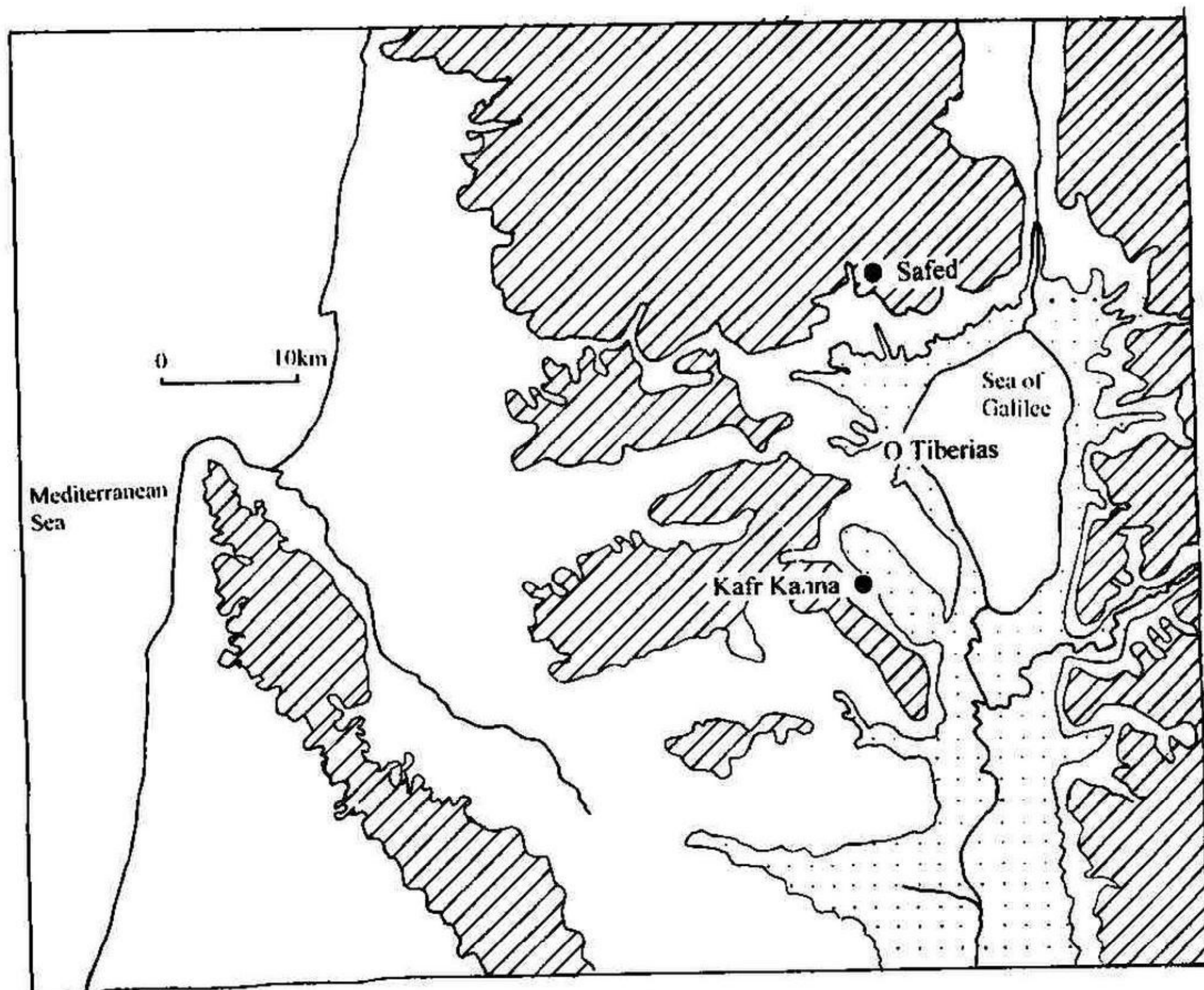
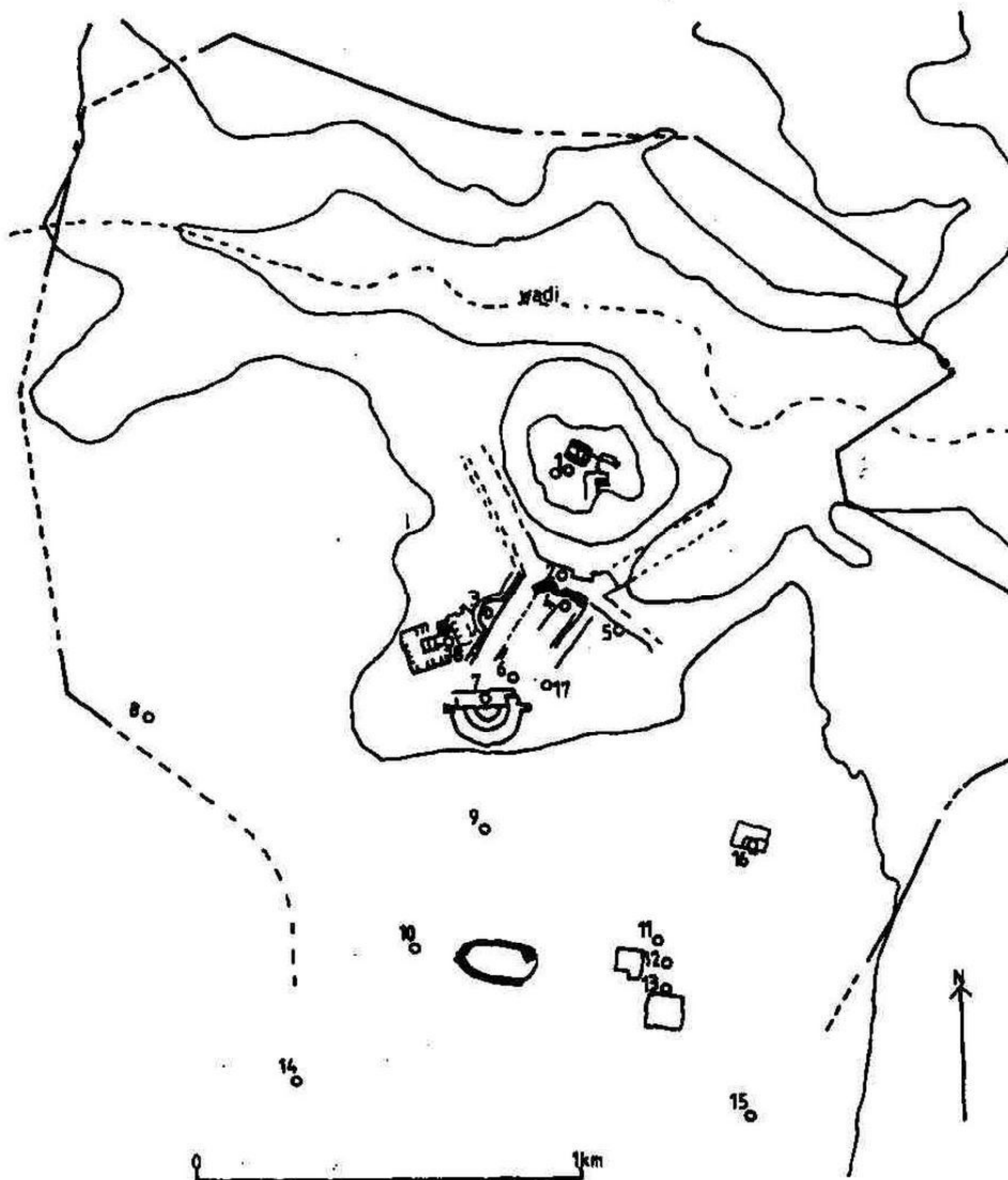


Figure 39. Urban centres in Galilee during the Ottoman period.



Baysan in the Early Islamic Period

1) Umayyad housing, mosque and fortifications.
2) Umayyad shop units.
3) Umayyad , Muslim cemetery.
4) Abbasid mosque.
5) Umayyad monumental suq.
6) Umayyad pottery workshop.
7) Umayyad pottery workshop.
8) Umayyad housing.
9) Umayyad housing.
10) Umayyad housing.
11) Umayyad housing.
12) Umayyad housing.
13) Umayyad housing.
14) Umayyad housing.
15) Umayyad housing.
16) Mosque, possibly Abbasid
17) Umayyad dyeing installations
18) Umayyad lime kiln

O industrial
O funerary
O commercial
O religious (mosque)
O residential

Figure 40. Baysan in the early Islamic period.

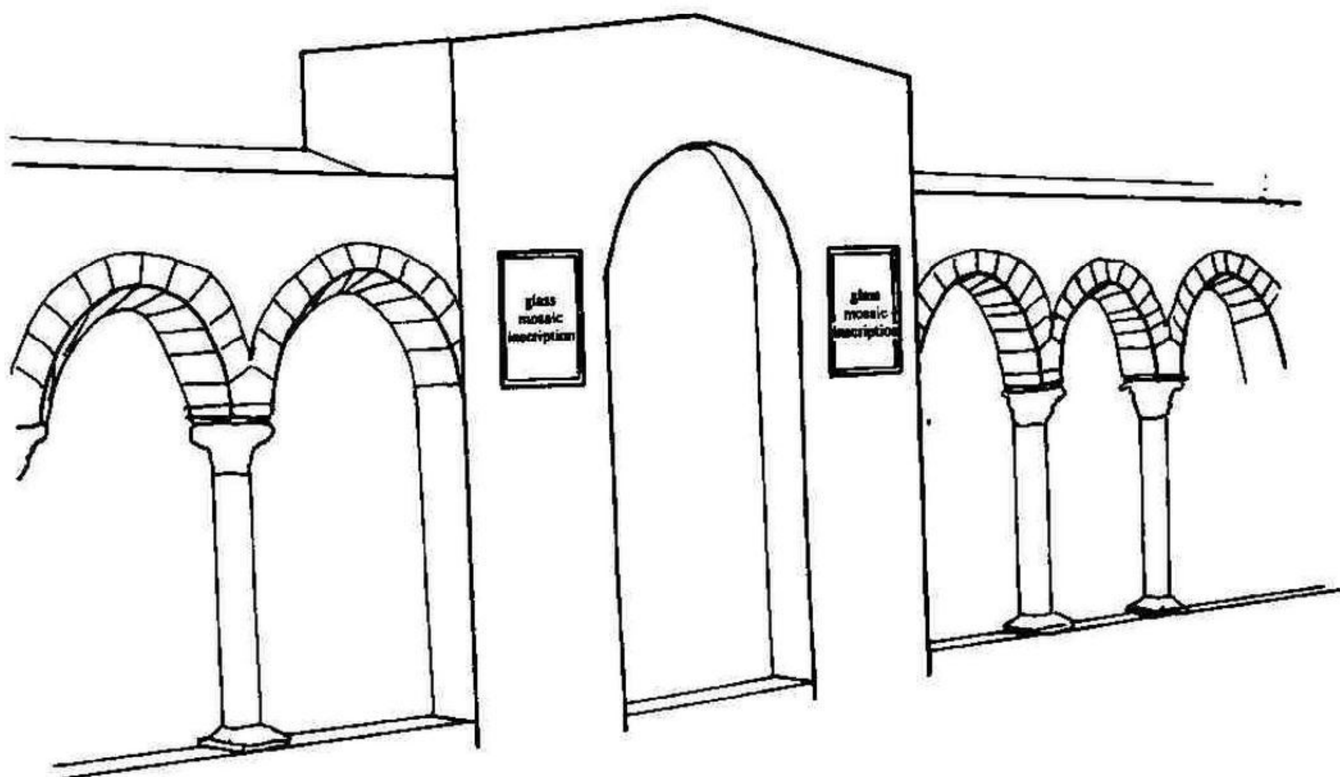


Figure 41. Baysan. Reconstruction of Umayyad market entrance with glass mosaic inscriptions (after Khamis 1997, 49).

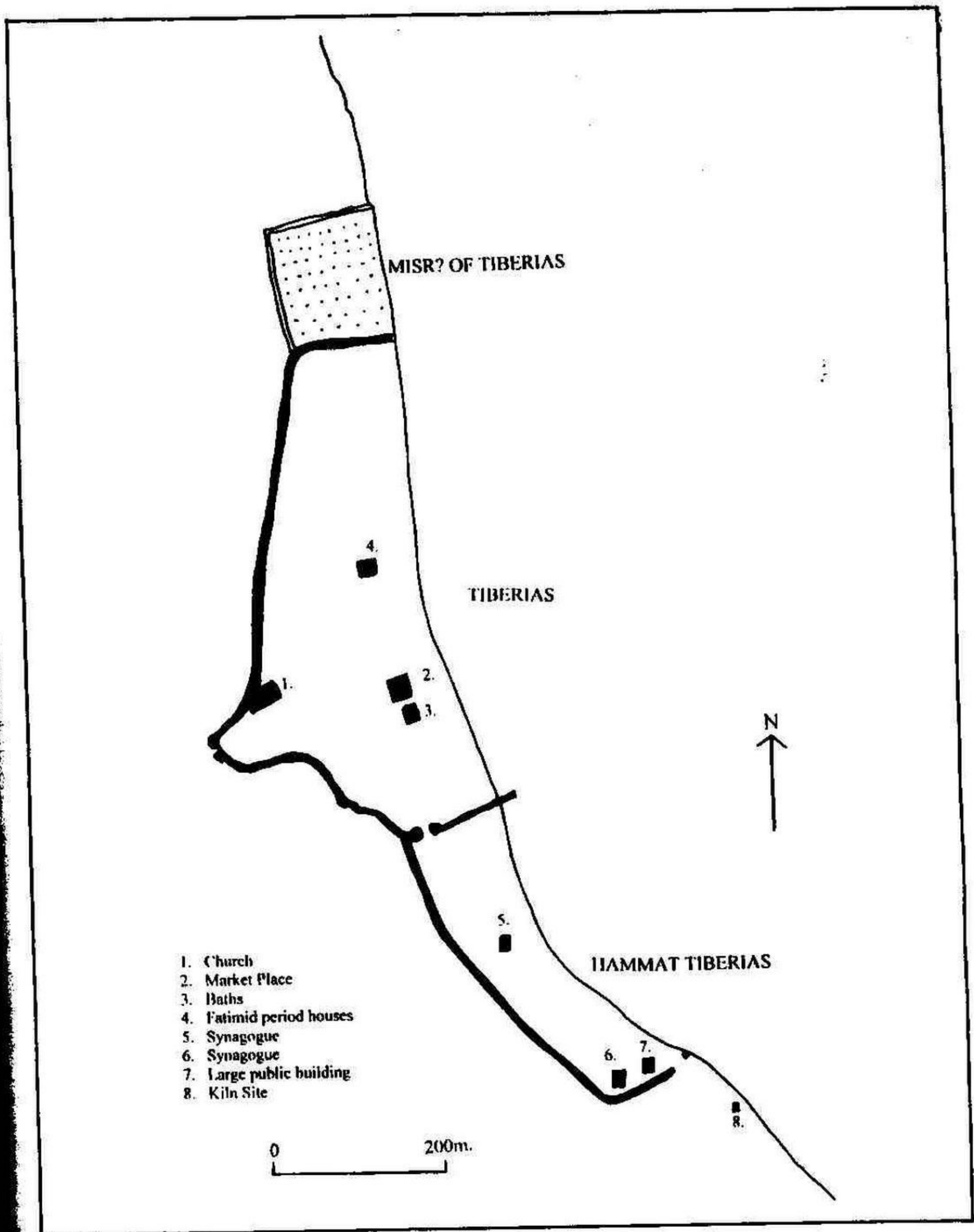


Figure 42. Tiberias in the early Islamic period.

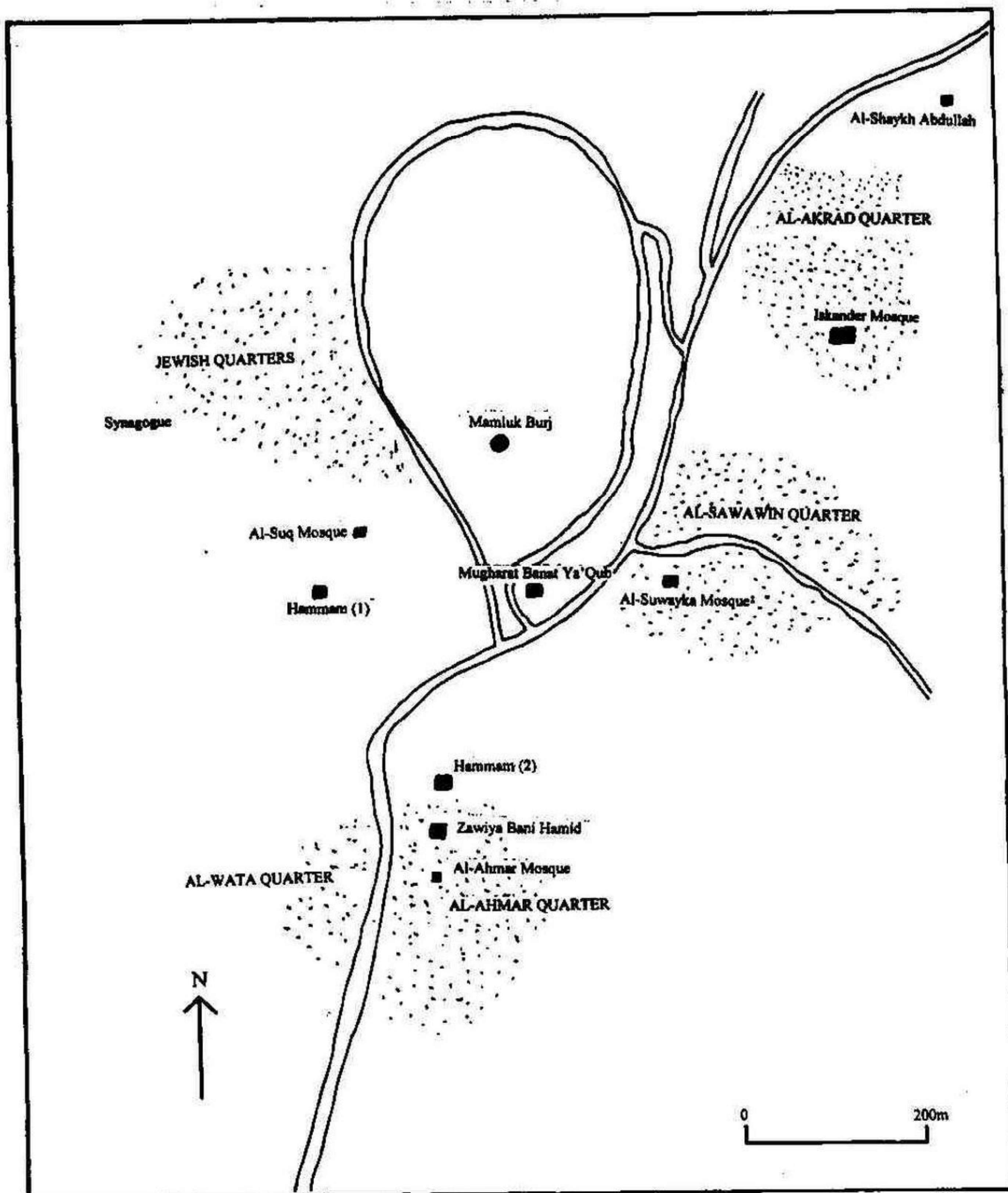


Figure 43. Safed; historic buildings and quarters.

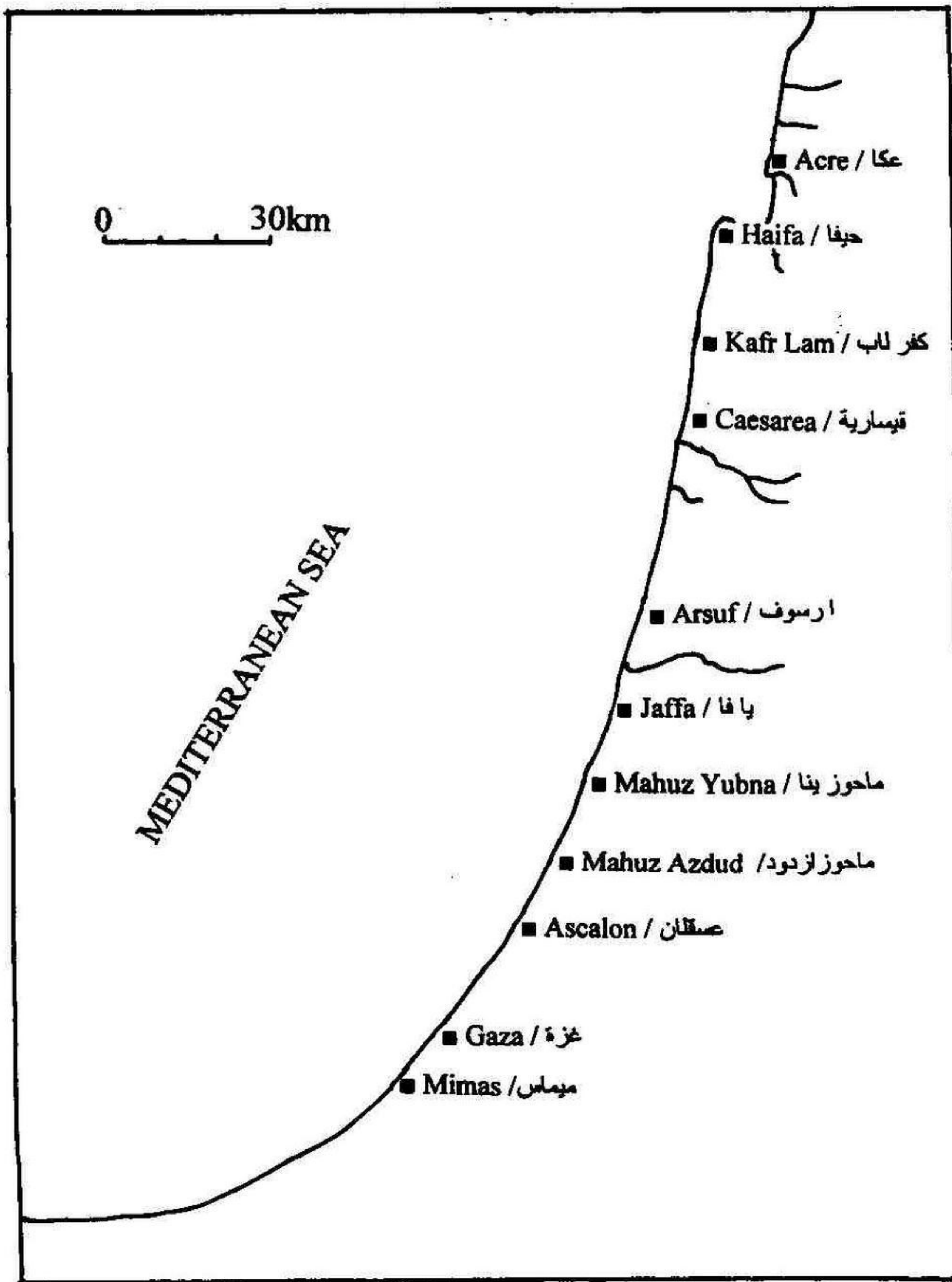


Figure 44. Coast of Palestine in the tenth century with ribatat after Muqaddasi.

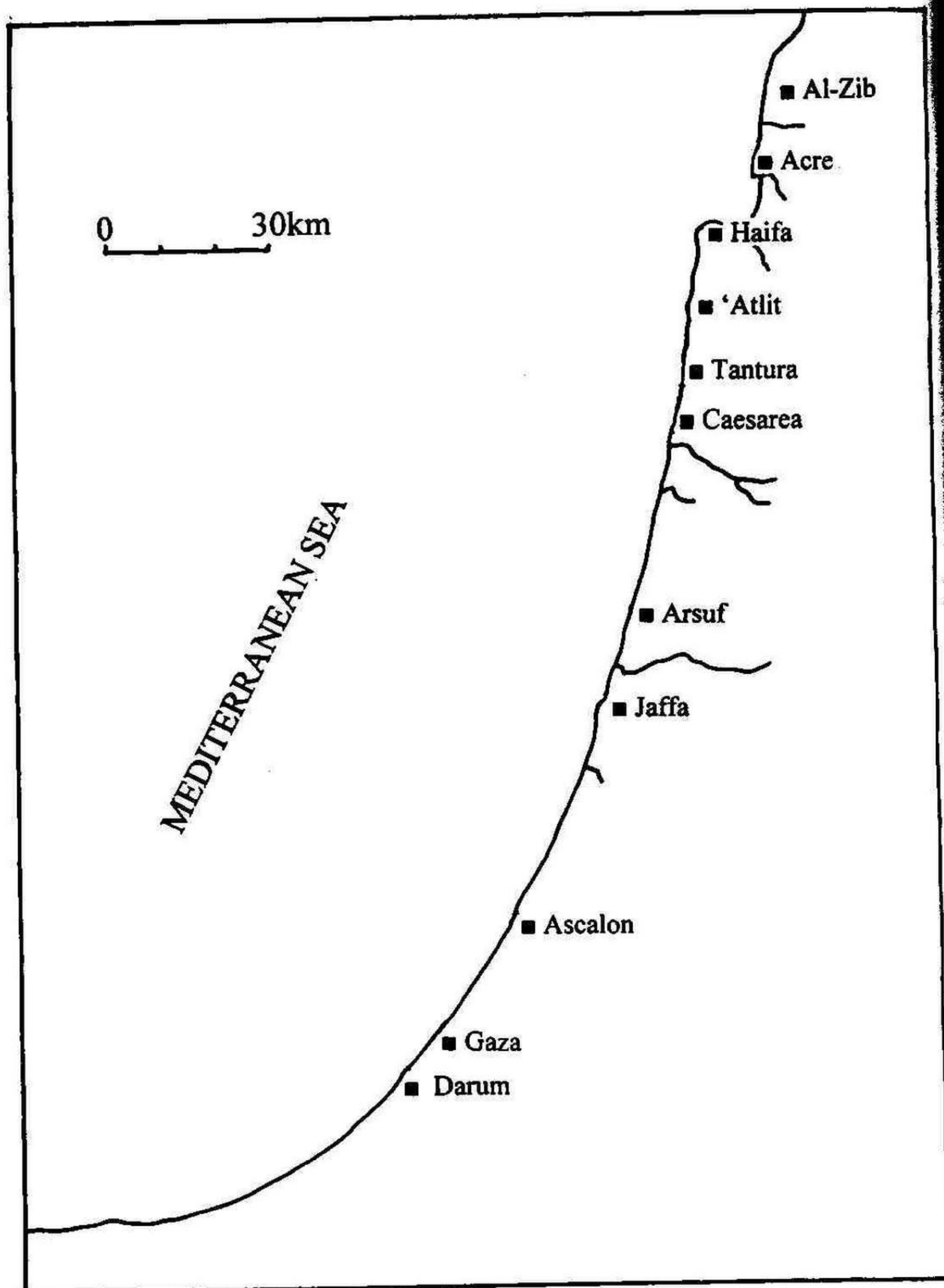


Figure 45. Coastal towns of Palestine under the Crusaders.

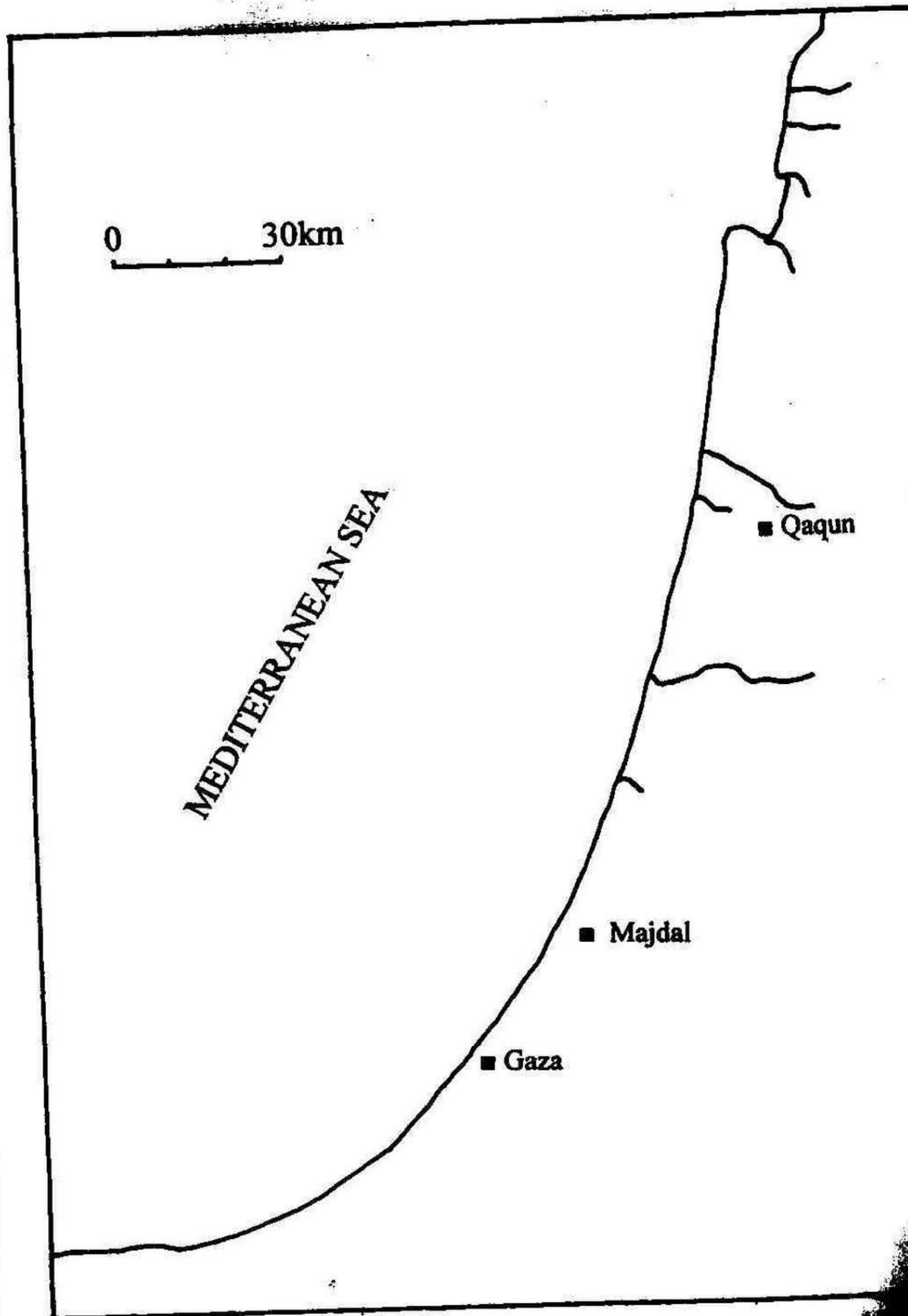
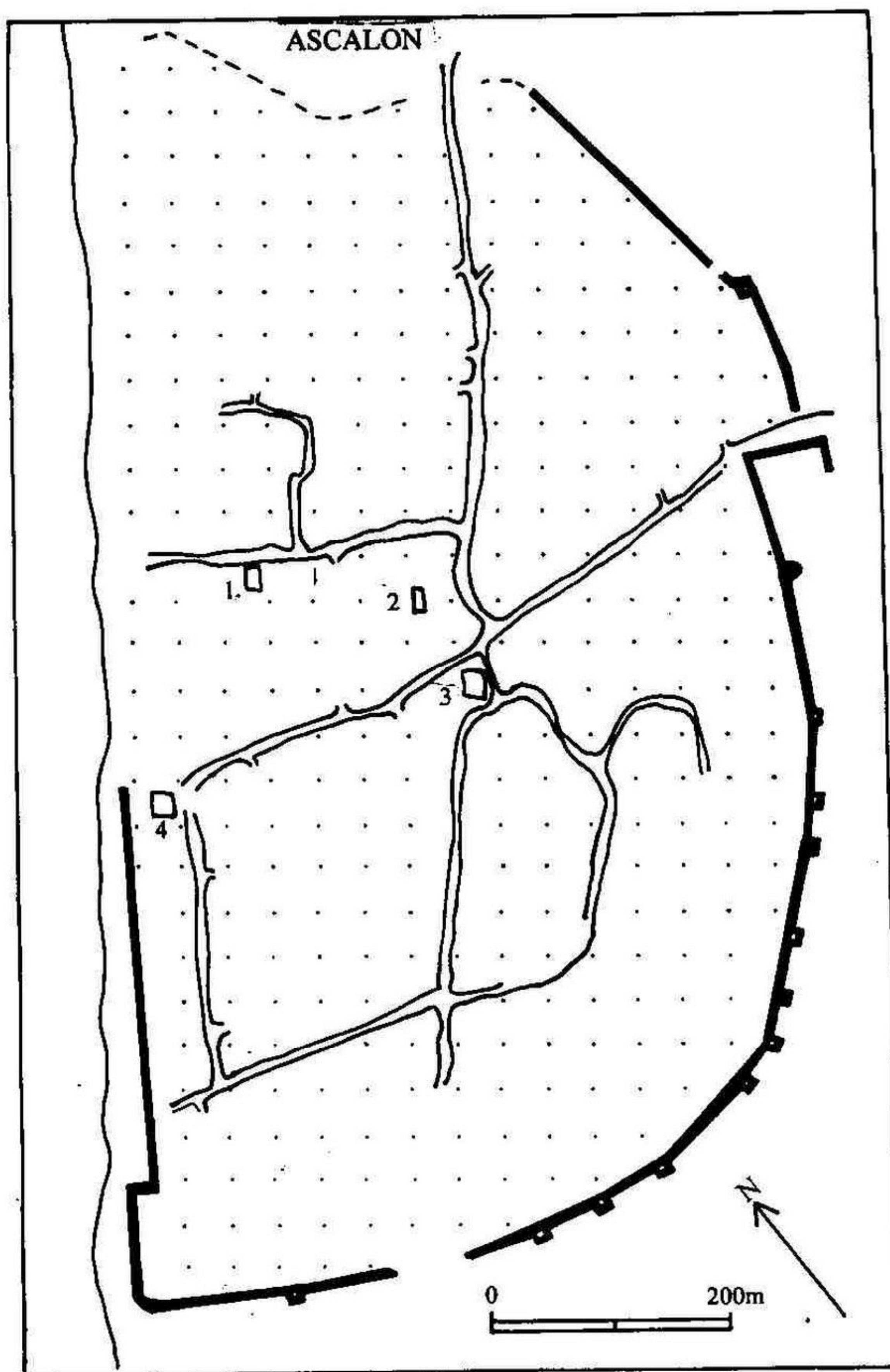


Figure 46. Coast of Palestine under the Mamluks.



1 Fatimid houses and shops
2 Bathouse
3 Great Mosque (probable location)
4 Green Mosque (probable location)

Figure 47. Ascalon in the early Islamic period.

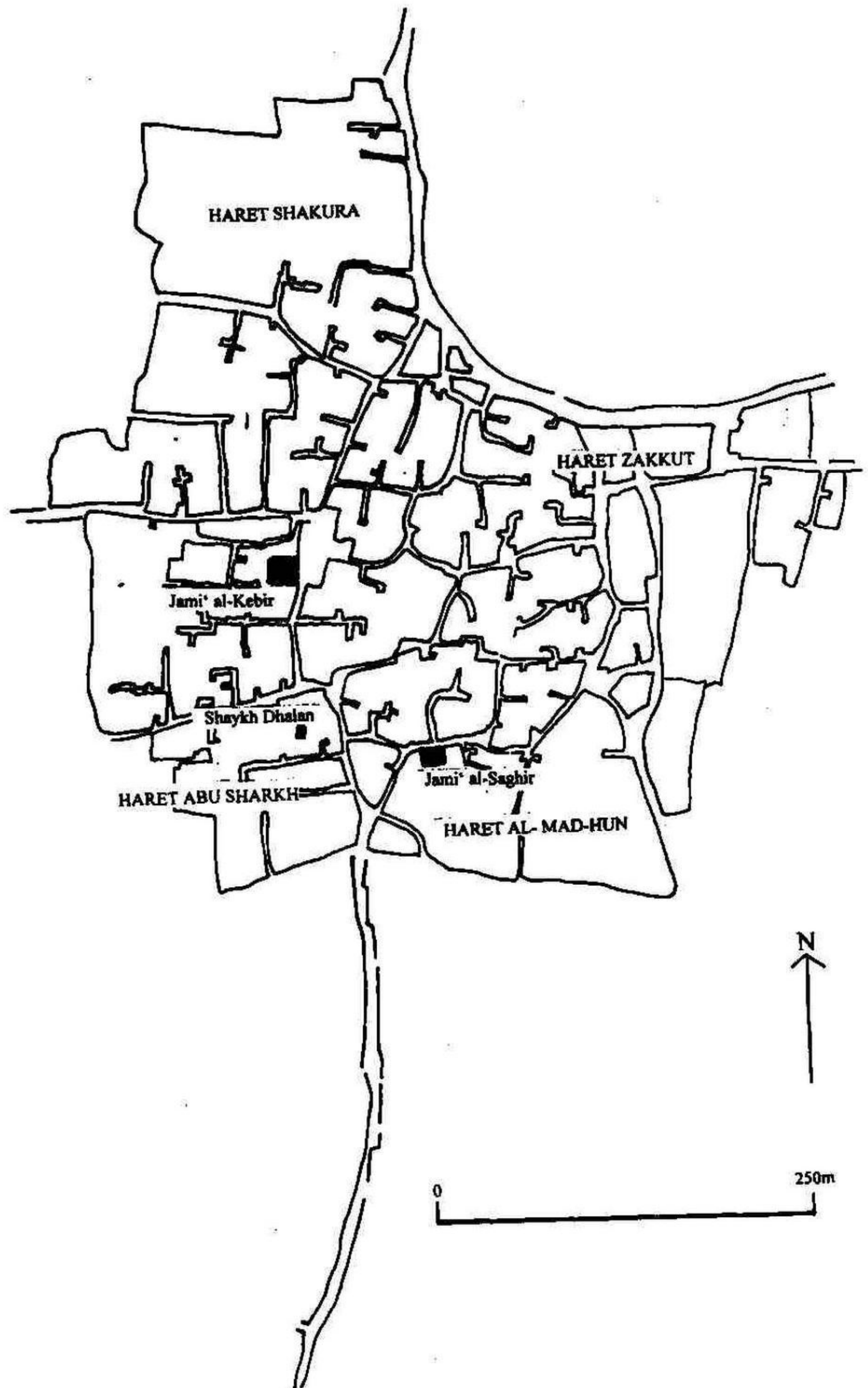


Figure 48. Majdal; historic buildings and quarters.

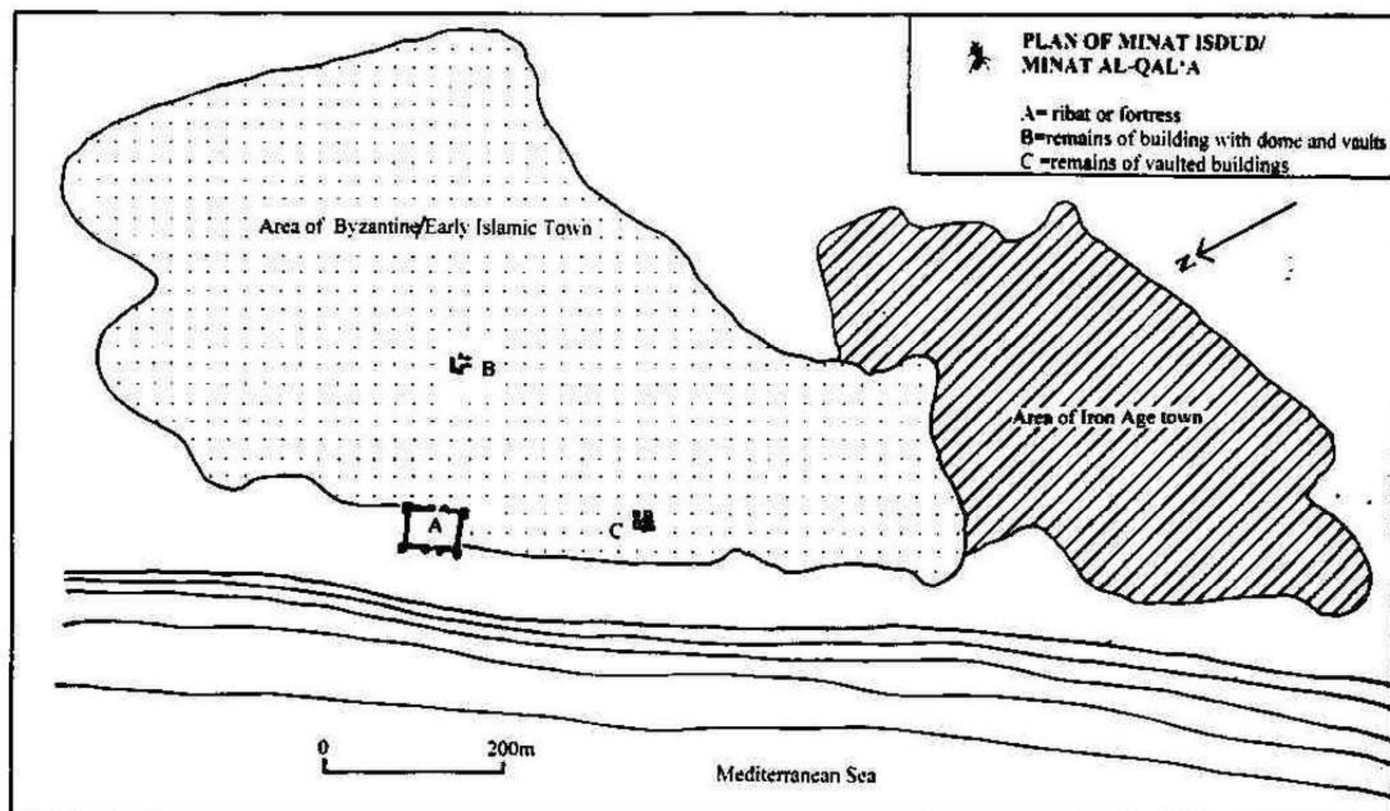


Figure 49. Plan of Minat Isdud/ Minat al-Qal'a.

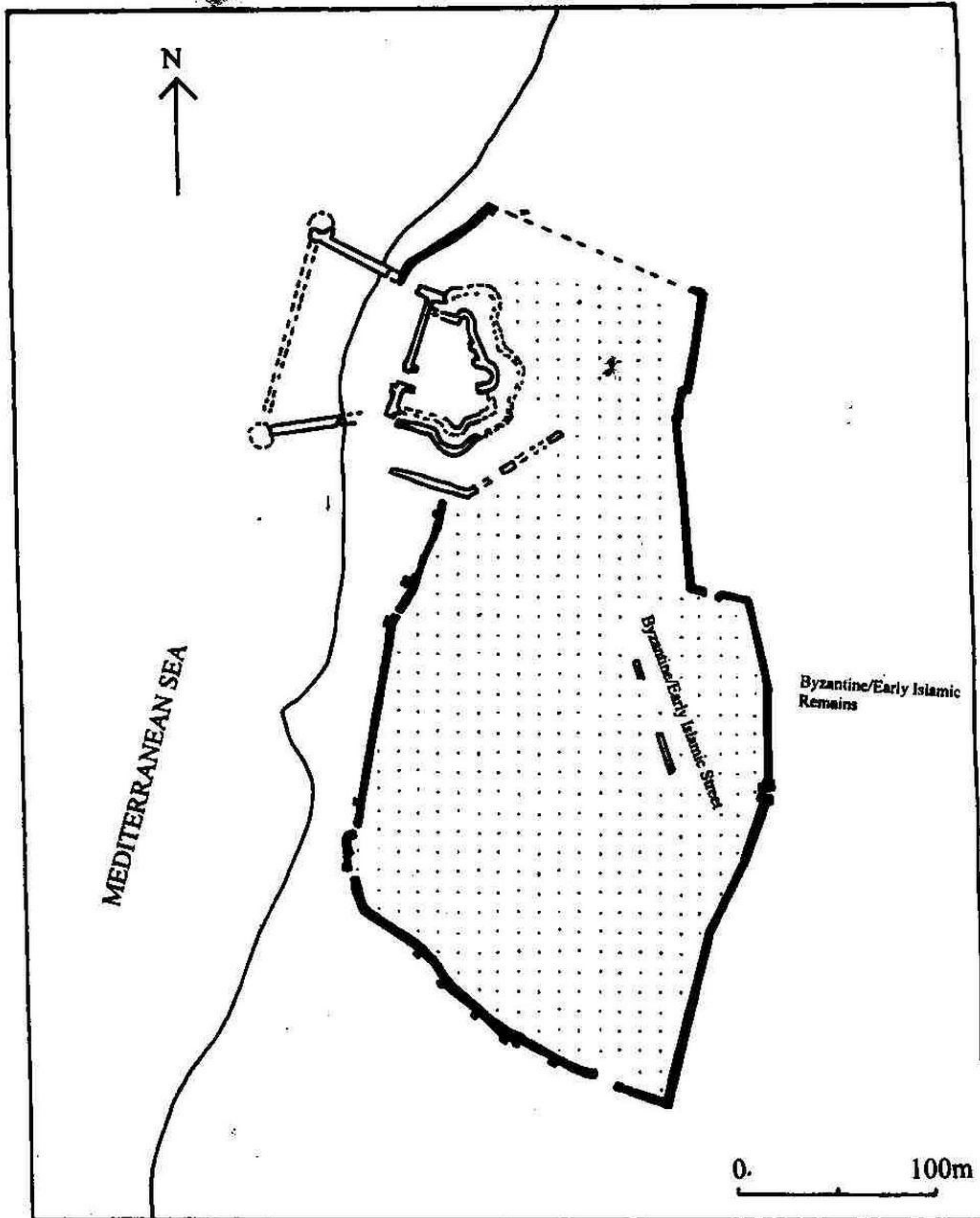


Figure 50. Arsuf.

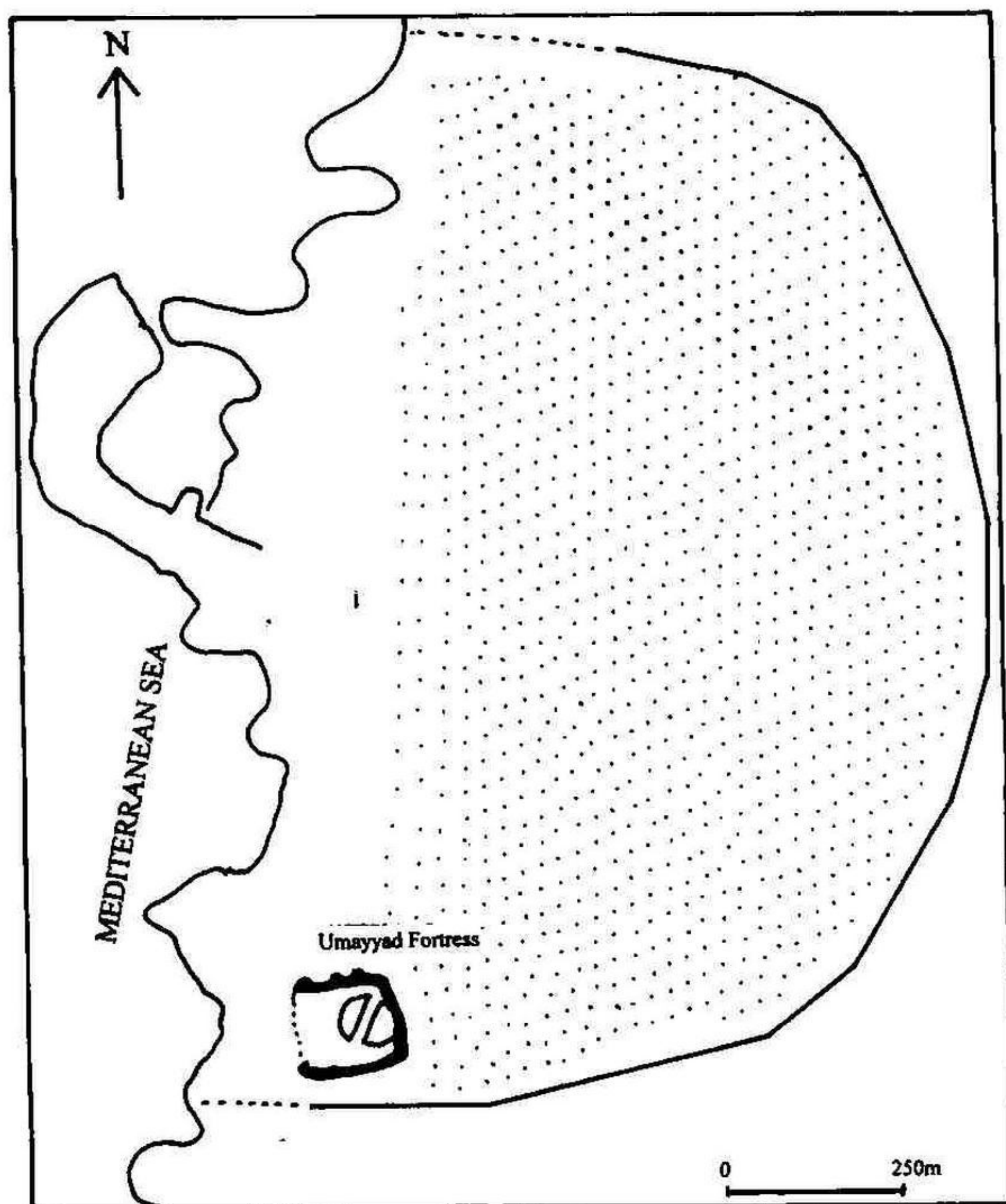


Figure 51. Caesarea in the early Islamic period. 1. Eighth century.

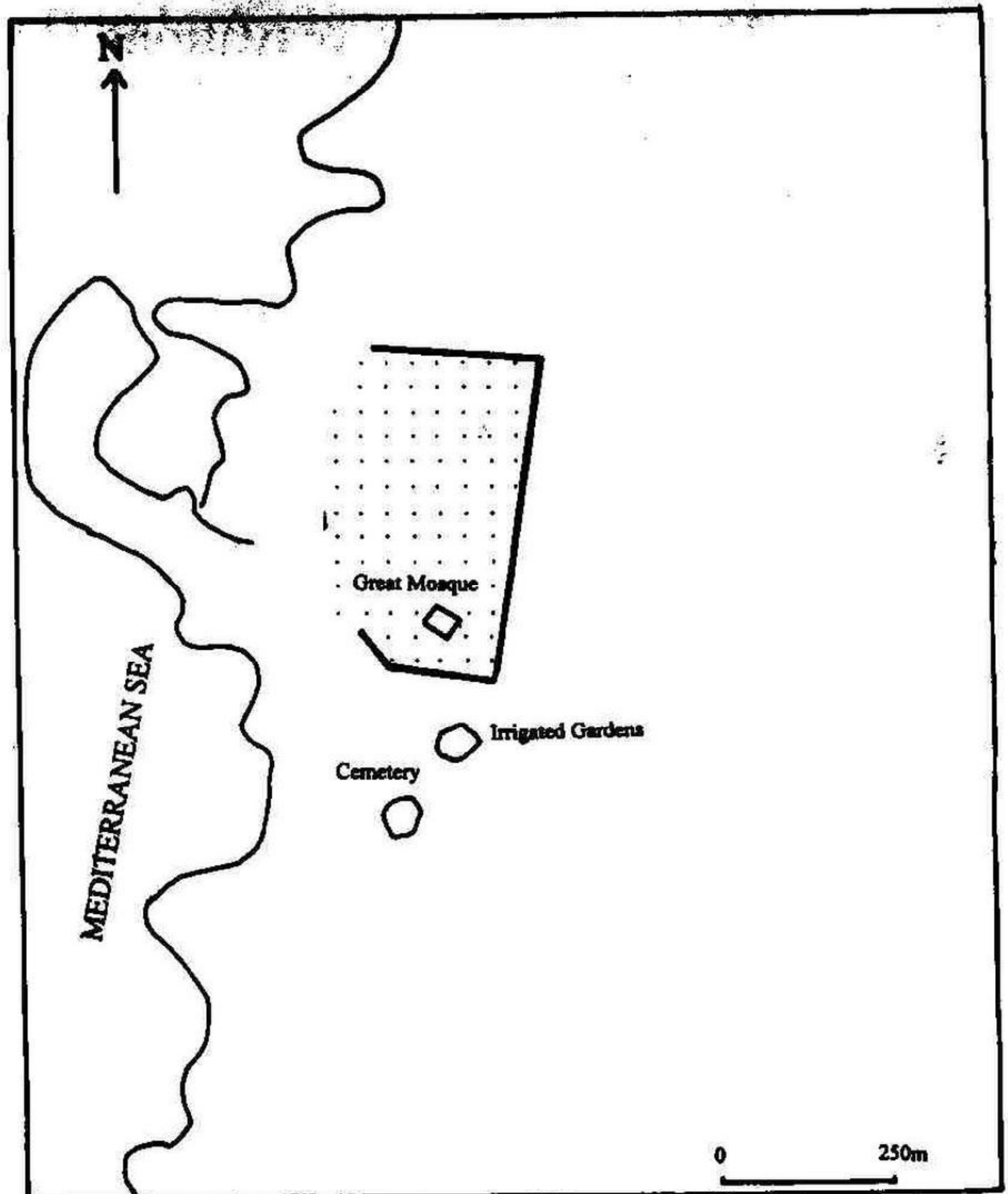


Figure 52. Caesarea in the early Islamic period. 2. Eleventh century.

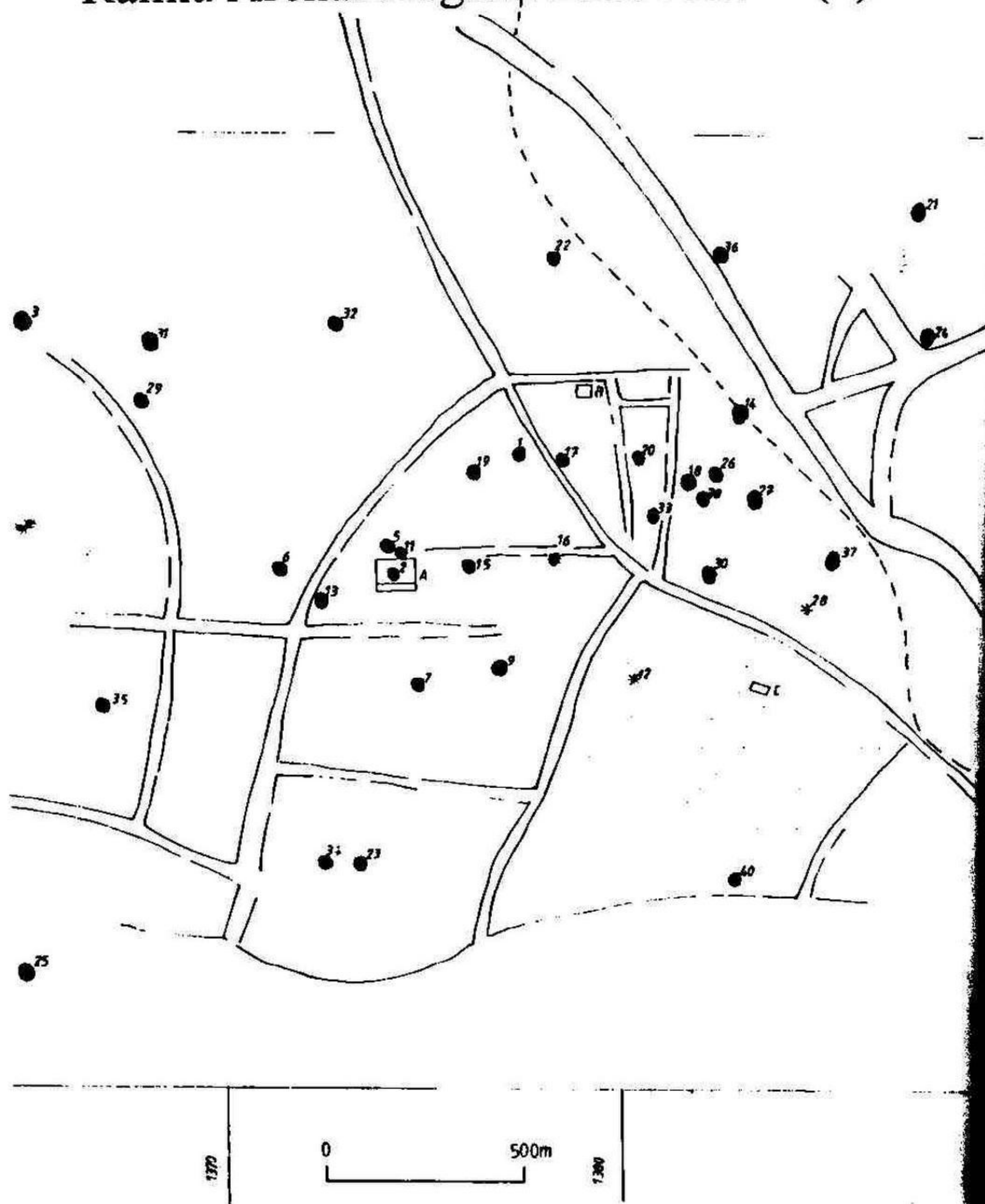


Figure 53. Ramla archaeological excavations (1), sites with pre-12th century pottery marked with black dot.

Ramla Archaeological Excavations (2)



A= White Mosque; B= Anaziyya Cisterns; C= Crusader church

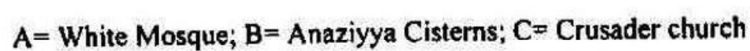
Sites with tombstones marked

Figure 54. Ramla archaeological excavations (2), sites with tombstones marked with black dot.

Ramla Archaeological Excavations (3)

0 500m

1370 1380 390



Sites with vats and red pigment marked

Figure 55. Ramla archaeological excavations (3), sites with vats and red pigment marked with black dot.

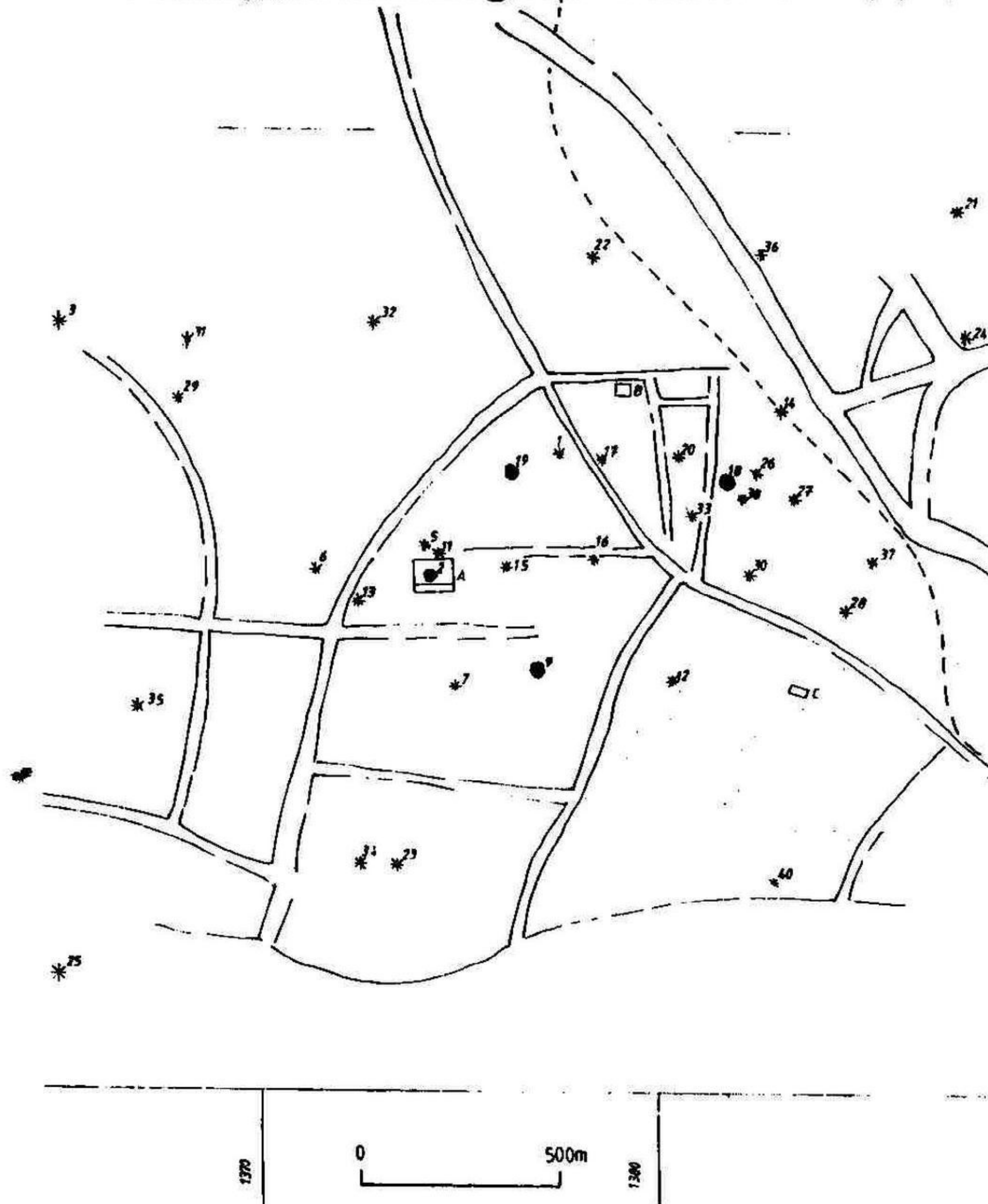


Figure 56. Ramla archaeological excavations (4), sites with pre-12th century high status buildings marked with b dot.

Ramla Archaeological Excavations (5)

500m

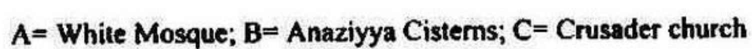
1370 1380 390

A= White Mosque; B= Anaziyya Cisterns; C= Crusader church

Sites with stone lined circular cisterns marked

Figure 57. Ramla archaeological excavations (5), sites with stone lined circular cisterns marked with black dot.

Ramla Archaeological Excavations (6)



Sites with evidence of pottery production marked

Figure 58. Ramla archaeological excavations (6), sites with evidence of pottery production markeith black dot.

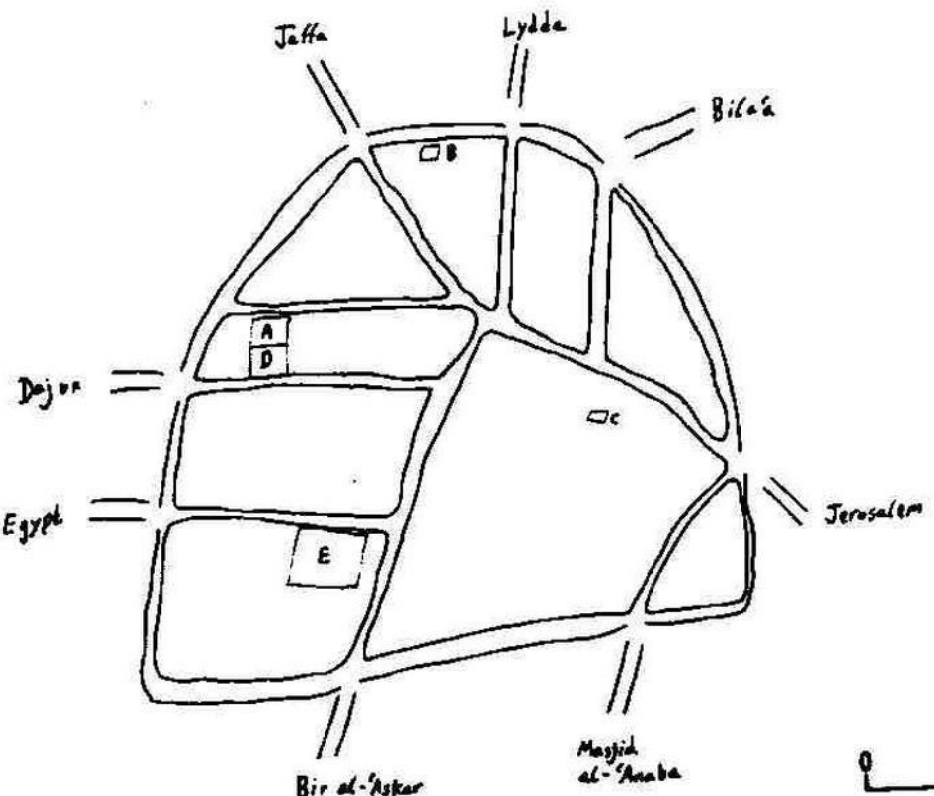
Ramla Archaeological Excavations (7)

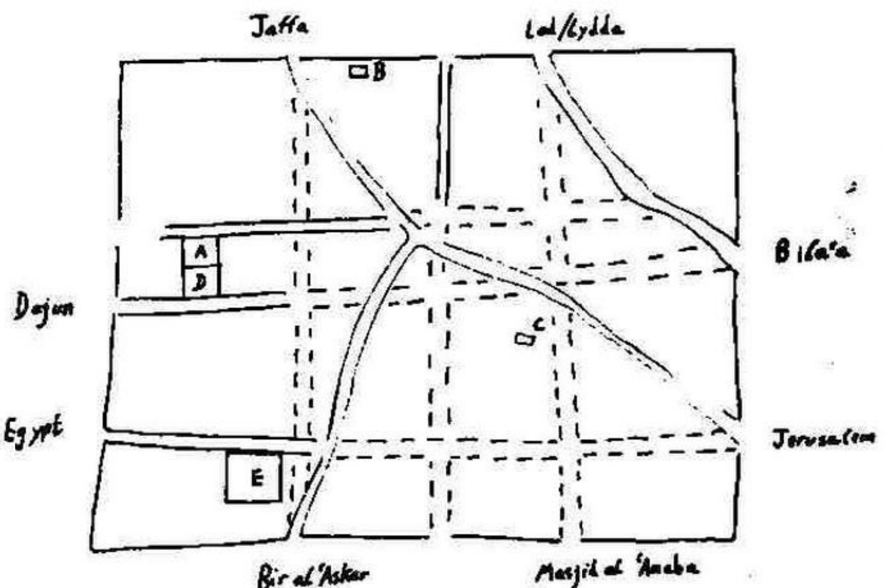


A= White Mosque; B= Anaziyya Cisterns; C= Crusader church

Sites with post 11th century pottery marked

Figure 59. Ramla archaeological excavations (7), sites with post 11th century pottery marked with black dot.





Two Reconstructions of Ramla
in the Early Islamic Period

A= White Mosque
B= Birkat al-'Anaziyya
C= Crusader church (to indicate location of later medieval city)
D= Site of Dar al-'Imara (assumed)
E= Site of hospital (assumed)

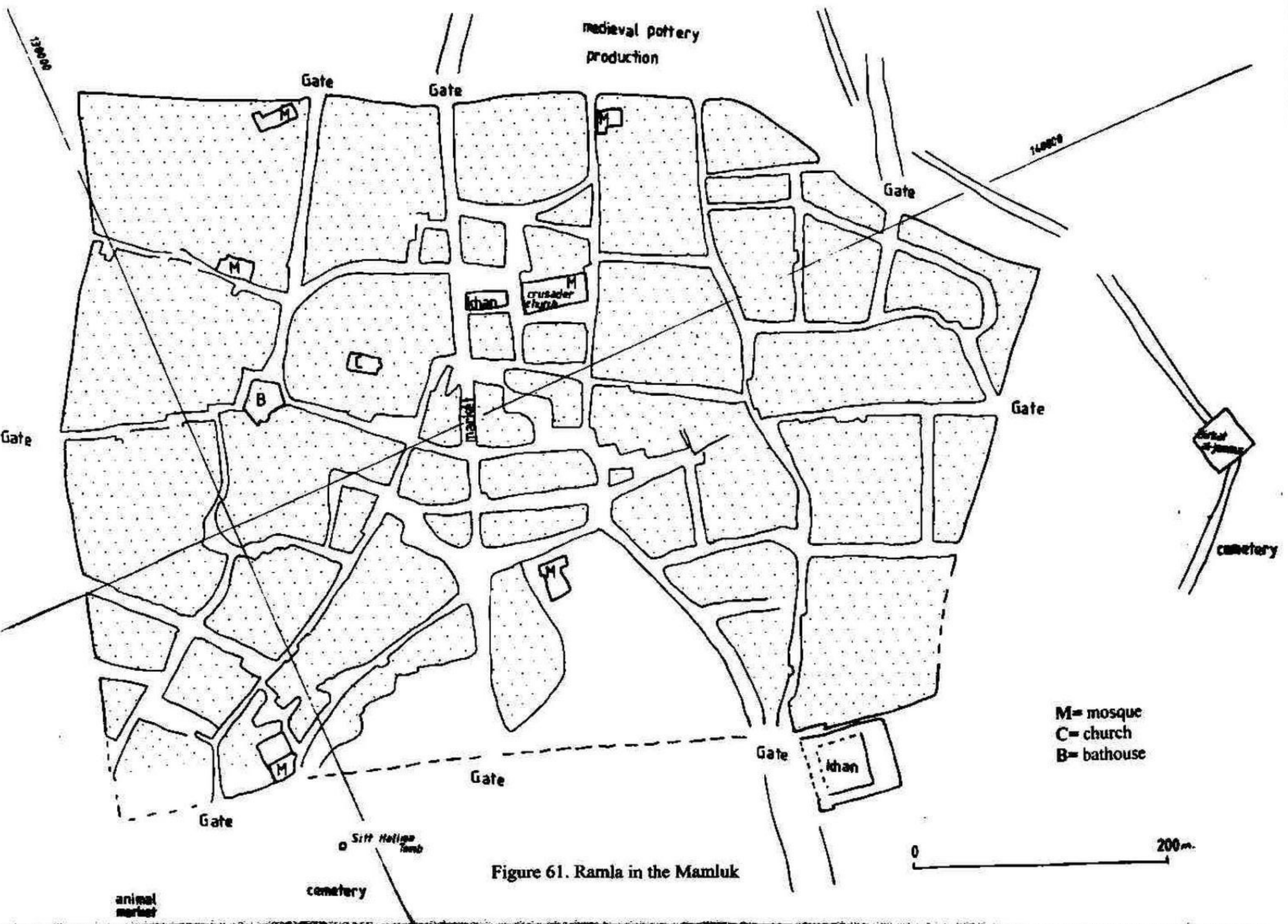


Figure 61. Ramla in the Mamluk

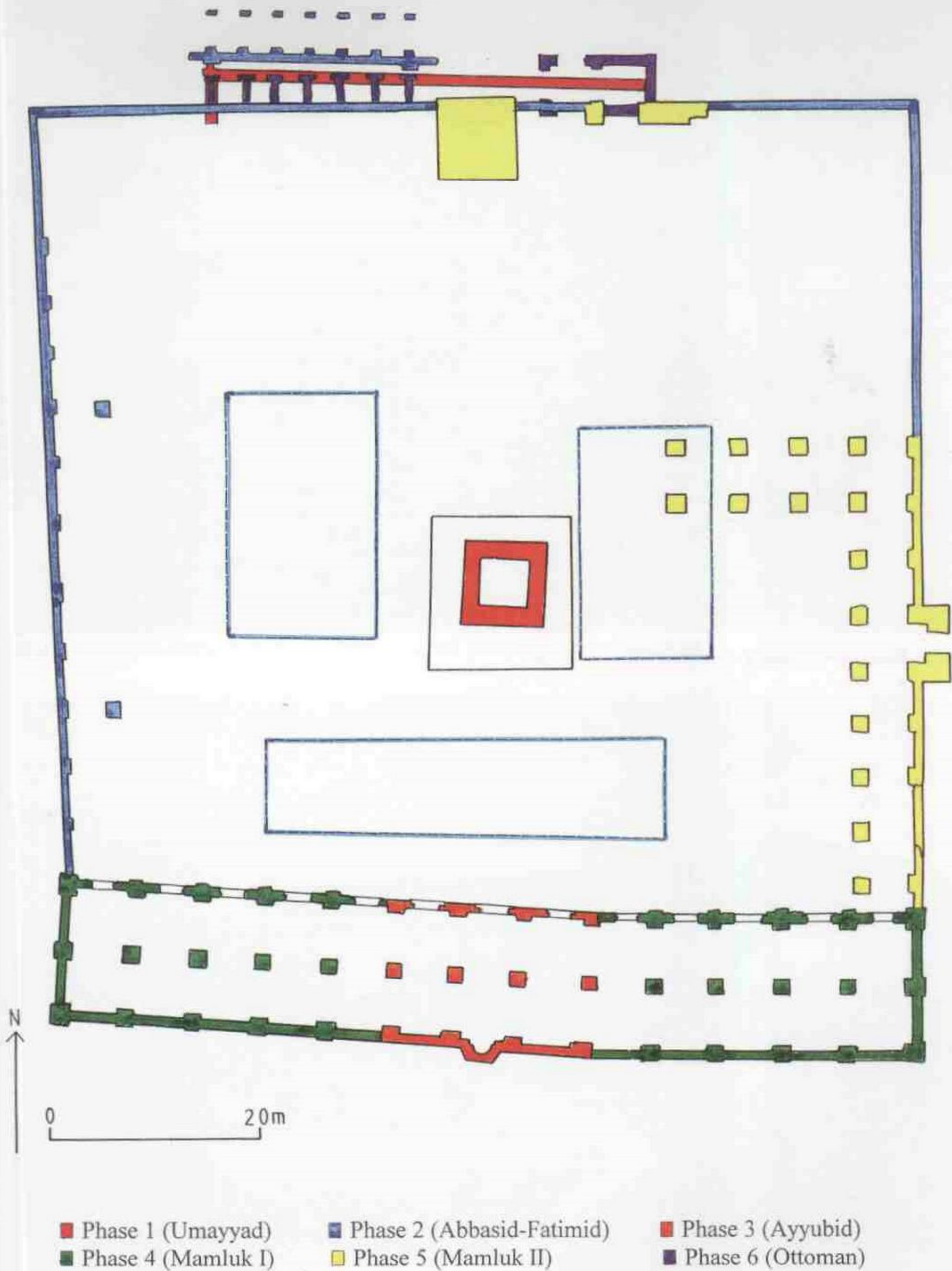


Figure 62. The White Mosque Ramla. Archaeological phase plan based on Kaplan (1959), Ben Dov 1984, Burgoy (unpublished) and personal observation.

market

Plate 1. Kufa; Dar al-'Imara with Great Mosque behind.

Plate 2. 'Anjar. View of city from North-West with cardo running diagonally across foreground.

Plate 3. Khirbat al-Mafjar near Jericho. View of palace with bathhouse in background.

Plate 4. Khirbat al-Mafjar near Jericho. Mosque.

Plate 5. Jisr Jindas between Ramla and Lydda. One of a number of bridges built by Bayars to revive the Via Maris.



Plate 6. Jisr Jindas between Ramla and Lydda. Detail of lions framing inscription.



Plate 7. Merv: Aerial view of the early city, Gyaur Kala, and its citadel Erk Kala (c.500 BC to 1100 AD). background the southern part of the medieval city of Sultan Kala with mausoleum of Sultan Sanjar in to right co

is.



Plate 8. Merv: mausoleum of Sultan Sanjar in the centre of Sultan Kala.

Plate 9. Nessana: acropolis with twentieth century Turkish hospital visible on summit.

Plate 10. Nessana: view of early remains from acropolis.

Plate 11. Isbaita / Shivta: view of town from north with fortified wall of North church in foreground.



Plate 12. Isbaita / Shivta: interior of North Church.



Plate 13. Isbaita / Shivta: mosque adjacent to South Church.

Plate 14. Isbaita / Shivta: One of two large reservoirs at centre of town.

Plate 15. Kh.Futais/ Photis. One of the 25 cisterns.

Plate 16. Baysan: Jami' al-'Arabain. Note larger masonry at base of wall and shape of minaret (No.16 on Fig 40).



Plate 17. Baysan: Crusader citadel with earlier remains in foreground. (D.Pringle 206/27)

Plate 18. Baysan: Khan al-Ahmar to the west of the medieval town.



Plate 19. Saffuriyya: Crusader tower (re-modelled in eighteenth nineteenth and twentieth centuries) in the centre of t ruins. Note re-use sarcophagai.



Plate 20. Jaffa. Re-used Corinthian capital in courtyard of Great Mosque (Jami' al-Kebir).



Plate 21. Jaffa, Sea Mosque. Note cylindrical late Ottoman minaret stands on an earlier, medieval(?), base.



Plate 22. Majdal; Jami' al- Kebir from west with modern market place in foreground (before 1948 market place was to east of mosque).



Plate 23. Majdal; Jami' al- Kebir from east with site of pre-1948 market place in foreground.



Plate 24. Majdal; Jami' al- Kebir entrance to courtyard with re-used columns and capitals.



Plate 29. Arsuf: southern part of Umayyad city wall.

Plate 30. Arsuf: Haram Sidna 'Ali. Shrine of Mamluk origin located to the south of the Crusader and early Islamic city.

Plate 31. Caesarea: Bosnian mosque (nineteenth century).



Plate 32. Yibna/ Yavne. Medieval bridge attributed to Mamluk Sultan Baybars circa AD 1270.



Plate 33. Yibna/ Yavne. Maqam (shrine) Abu Hureira built in 1274 under the orders of the Mamluk Sultan Baybars.



Plate 34. Ramla: view of city from East.



Plate 35. Ramla: White Mosque from North-West with square structure in foreground and main prayer hall behin (Creswell Archive Ashmolean Museum, Oxford. Neg. No. 5229).



Plate 36. Ramla: White Mosque with main prayer hall from minaret. Note straight joint separating 1st bay from 2nd b to left and right of mihrab bay (Creswell Archive Ashmolean Museum, Oxford. Neg. No. C5226).



Plate 37. Ramla: White Mosque from East with minaret to left and graveyard in foreground (Creswell Archive Ashmolean Museum, Oxford. Neg. No. 5230).



Plate 39. Ramla: al-'Anaziyya cisterns from above (Creswell Archive Ashmolean Museum, Oxford. Neg. No. C5221).

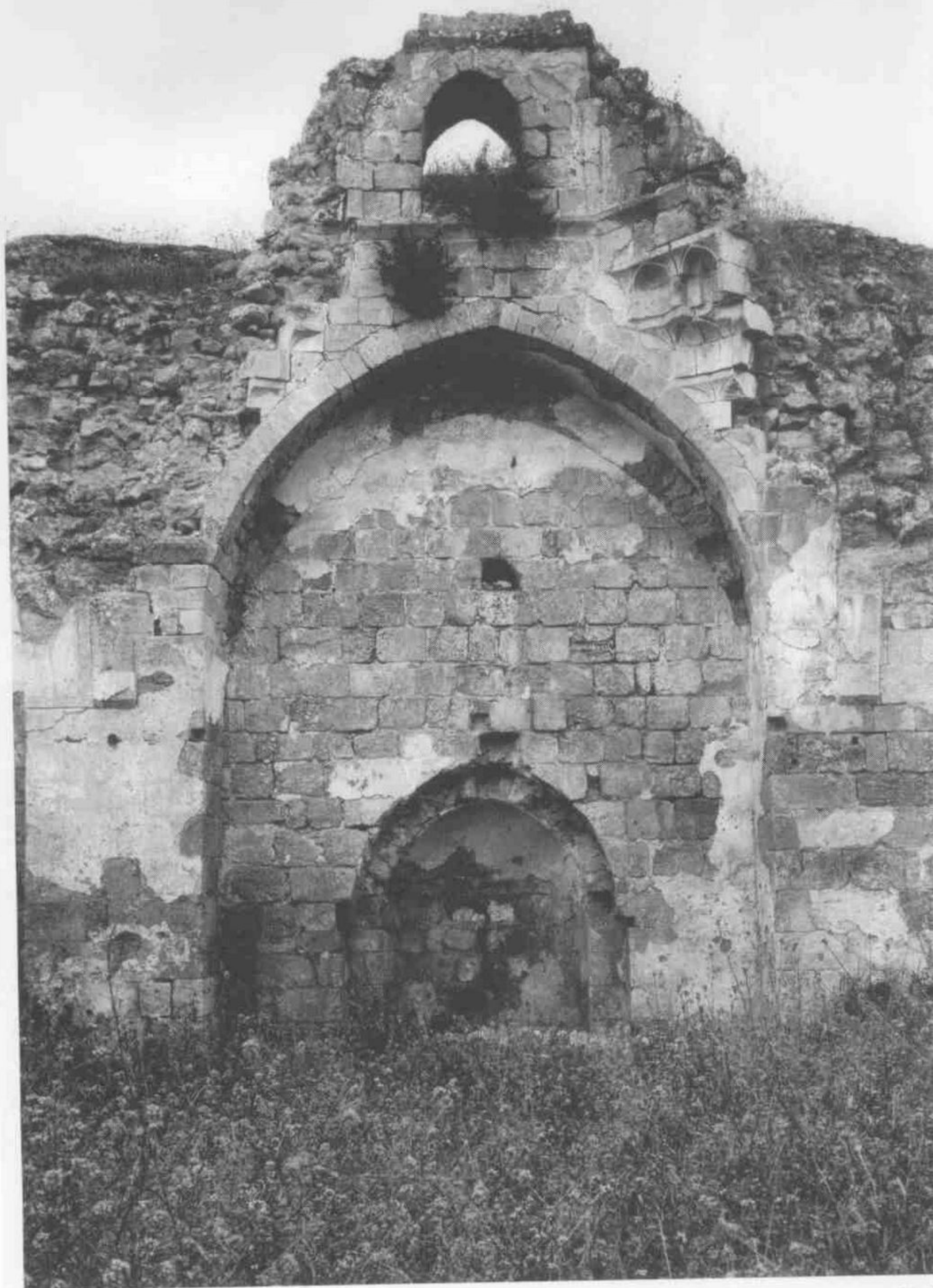


Plate 38. Ramla: White Mosque. Detail of dome above mihrab. Note gap between back wall containing mihrab arch above with muqarnas pendentive to support drum for dome (Creswell Archive, Ashmolean Museum, Oxford. No. 5232).



Plate 40. Ramla: al-'Anaziyya cisterns during clearance (Creswell Archive, Ashmolean Museum, Oxford. Neg. No. 5288).



Plate 41. Ramla: al-'Anaziyya cisterns. Inscription dated Dhu'l-Hijja 172 (May 789).



Plate 42. Ramla; excavations to south-west of White Mosque during development work (No. 13 on Figs. 53-59).



Plate 43. Ramla: detail of excavations to south-west of White Mosque showing tessellated pavement.



Plate 44. Ramla. Mosaic with animals including lions, birds, and donkey. Currently in Ramla Municipal Library. Originally from Glick's excavations in 'Little Holland' (No. 18 Figs. 53-9).

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